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NEWS 4 JAN 16 IPC version 2007.01 thesaurus available on STN
NEWS 5 JAN 16 WPIBS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 6 JAN 22 CA/CAPUS updated with revised CAS roles
NEWS 7 JAN 22 CA/CAPUS enhanced with patent applications from India
NEWS 8 JAN 29 PHAR reloaded with new search and display fields
NEWS 9 JAN 29 CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS 10 FEB 15 PATRASPAC enhanced with Drug Approval numbers
NEWS 11 FEB 15 RUSSIAPAT enhanced with pre-1994 records
NEWS 12 FEB 23 KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13 FEB 26 MEDLINE reloaded with enhancements
NEWS 14 FEB 26 EMBASE enhanced with Clinical Trial Number field
NEWS 15 FEB 26 TOXCENTER enhanced with reloaded MEDLINE
NEWS 16 FEB 26 IFTCDB/IFTPAT/IFTUDB reloaded with enhancements
NEWS 17 FEB 26 CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS 18 MAR 15 WPIBS/WPIX enhanced with new FRAGITSTR display format
NEWS 19 MAR 16 CASREACT coverage extended
NEWS 20 MAR 20 MARPAT now updated daily
NEWS 21 MAR 22 LWPJ reloaded
NEWS 22 MAR 30 RDISCLOSURE reloaded with enhancements
NEWS 23 MAR 30 INPADOCB will replace INPADOC on STN
NEWS 24 APR 02 JICST-BPUS removed from database clusters and STN
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.01c(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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FILE 'HOME' ENTERED AT 07:00:19 ON 24 APR 2007

=> FILE HCAPUS USPATFULL BIOSIS MEDLINE	
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CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 07:00:31 ON 24 APR 2007
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FILE 'MEDLINE' ENTERED AT 07:00:31 ON 24 APR 2007

=> s destructible surfactant
L1 15 DESTRUCTIBLE SURFACTANT

=> s 11 and PROPANESULFONATE
L2 0 L1 AND PROPANESULFONATE

=> s 11 and ALS
L3 0 L1 AND ALS

=> dup rem 11
PROCESSING COMPLETED FOR L1
L4 15 DUP REM L1 (0 DUPLICATES REMOVED)

=> d 14 1-15 bibl kwic

L4 ANSWER 1 OF 15 HCAPUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2006:727510 HCAPUS Full-text

DOCUMENT NUMBER: 146:345145

TITLE: Photo-destructible surfactants in microemulsions

AUTHOR(S):

CORPORATE SOURCE: Eastoe, Julian
School of Chemistry, University of Bristol, Bristol,

SOURCE: BS8 1TS, UK
Progress in Colloid and Polymer Science (2006), 133,

CODEN: PCPSD7; ISSN: 0340-255X

PUBLISHER: Springer GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 9

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A photo-destructible surfactant sodium 4-hexylphenyl-azosulfonate (C6-PAS, Scheme 1) was employed in normal AOT-stabilized water-in-heptane microemulsions. Phase studies are consistent with initially homogeneous irradiations, for which significant changes in stability as a function of UV irradiation time are observed. Photolysis of C6-PAS in these systems results in eventual separation of water to yield a Winsor II system. IR NMR spectra show that C6-PAS undergoes UV-induced decomposition, to yield a mixture of 4-

2

hexylphenol and the nonsurface active hexylbenzene as main product. This photo-triggered breakdown gives rise to changes in adsorption and aggregation properties of C₆-Phs, representing a unique route to induce microemulsion destabilization. Small-angle neutron scattering (SANS) was used to follow the resulting UV-induced shrinkage of the water nanodroplets: a maximum volume decrease is in the order of 60-70%. Multi-contrast SANS expts. gave further insight, for example the surfactant shell thickness remained constant (approx. 9 Å). This study represents a novel example of light-induced microemulsion destabilization.

I4 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:972310 HCAPLUS Full-text
DOCUMENT NUMBER: 140:17749
TITLE: Destructible surfactants and use in small molecule analysis
INVENTOR(S): Mallett, Claude; Russel, Reb J., II; Yardley, Kurt
PATENT ASSIGNEE(S): Waters Investments Limited, USA
SOURCE: PCT Int. Appl., 45 pp.
DOCUMENT TYPE: Patent
CODEN: PIXXD2
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102536	A2	20031211	WO 2003-US16619	20030530
WO 2003102536	A3	20040902		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MM, NZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003234681	A1	20031219	AU 2003-234681	20030530
US 2006094000	A1	20060504	US 2005-516419	20050829
			US 2002-385018P	P 20020531
PRIORITY APPLN. INFO.:			WO 2003-US16619	W 20030530

OTHER SOURCE(S): MARPAT 140:17749
ST antonic destructible surfactant dioxolane functional group
I4 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:972250 HCAPLUS Full-text
DOCUMENT NUMBER: 140:25191
TITLE: Destructible surfactants and uses thereof
INVENTOR(S): Bouvier, Edouard S. P.; Copton, Bruce John; Gebler, John C.; Gilar, Martin; Yu, Ying-Qing; Lee, Peter Jeng
PATENT ASSIGNEE(S): Waters Investments Limited, USA
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102225	A1	20031211	WO 2003-US16820	20030530
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MM, NZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003234682	A1	20031219	AU 2003-234682	20030530
US 2006057659	A1	20060316	US 2005-516418	20050513
PRIORITY APPLN. INFO.:			US 2002-385021P	P 20020531
			WO 2003-US16820	W 20030530

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ST prepn destructible surfactant
I4 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:824508 HCAPLUS Full-text
DOCUMENT NUMBER: 134:2339
TITLE: Destructible surfactants and uses thereof
INVENTOR(S): Lee, Peter Jeng Jiong; Compton, Bruce J.
PATENT ASSIGNEE(S): Waters Investments Ltd., USA
SOURCE: PCT Int. Appl., 50 pp.
DOCUMENT TYPE: Patent
CODEN: PIXXD2
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000070334	A1	20001123	WO 2000-US13028	20000512
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MM, MX, NO, NZ, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZM, ZW, AM, AZ, BY, BG, BR, CH, CY, CZ, DE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2000048435	A	20001205	AU 2000-48435	20000512
EP 1181537	A1	20020227	EP 2000-930651	20000512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			US 1999-134113P	P 19990514
			WO 2000-US13028	W 20000512

OTHER SOURCE(S): MARPAT 134:2339
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
ST destructible surfactant
I4 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:143992 HCAPLUS Full-text

TITLE: New and usual surfactants
 AUTHOR(S): Menger, Fredric M.
 CORPORATE SOURCE: Department of Chemistry, Emory University, Atlanta, GA, 30322, USA
 SOURCE: Book of Abstracts, 217th ACS National Meeting, Anaheim, Calif., March 21-25 (1999), ANYL-155, American Chemical Society: Washington, D. C. CODEN: 67GHA6
 DOCUMENT TYPE: Conference: Meeting Abstract
 LANGUAGE: English
 AB Expts. with synthetic surfactants and lipids will be briefly described. Included will be: (a) amphiphiles with totally rigid hydrocarbon chains; (b) a surfactant that glues cells to vesicles; (c) surfactants with counterions of glucuronate glycosides; (d) a simple destructible surfactant; (e) a "defective" phospholipid; (f) gemini surfactants; and (g) a fiber-forming surfactant.

L4 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1999:146538 HCAPLUS Full-text
 TITLE: New and unusual surfactants
 AUTHOR(S): Menger, F. M.
 CORPORATE SOURCE: Department of Chemistry, Emory University, Atlanta, GA, 30322, USA
 SOURCE: Book of Abstracts, 217th ACS National Meeting, Anaheim, Calif., March 21-25 (1999), COLL-136, American Chemical Society: Washington, D. C. CODEN: 67GHA6
 DOCUMENT TYPE: Conference: Meeting Abstract
 LANGUAGE: English
 AB Expts. with synthetic surfactants and lipids will be briefly described. Included will be: (a) amphiphiles with totally rigid hydrocarbon chains; (b) a surfactant that glues cells to vesicles; (c) surfactants with counterions of glucuronate glycosides; (d) a simple destructible surfactant; (e) a "defective" phospholipid; (f) gemini surfactants; and (g) a fiber-forming surfactant.

L4 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1999:540450 HCAPLUS Full-text
 TITLE: New and unusual surfactants.
 AUTHOR(S): Menger, F. M.
 CORPORATE SOURCE: Department of Chemistry, Emory University, Atlanta, GA, 30322, USA
 SOURCE: Book of Abstracts, 218th ACS National Meeting, New Orleans, Aug. 22-26 (1999), COLL-003, American Chemical Society: Washington, D. C. CODEN: 67GHA6
 DOCUMENT TYPE: Conference: Meeting Abstract
 LANGUAGE: English
 AB Expts. with synthetic amphiphiles will be described. Included will be (a) surfactants with totally rigid hydrocarbon chains; (b) a surfactant that glues vesicles to cells; (c) a variety of new gemini surfactants; (d) a simple destructible surfactant; (e) a fiber-forming surfactant; (f) a hyperextended surfactant.

L4 ANSWER 8 OF 15 USPATFULL on STN
 ACCESSION NUMBER: 1998:147231 USPATFULL Full-text
 TITLE: Compositions and methods for removal of detergents

5

INVENTOR(S): Switchenko, Arthur C., Mountain View, CA, United States
 Kurn, Nurith, Palo Alto, CA, United States
 Neukom, Christian, Mountain View, CA, United States
 Pfluo, Marcel, San Jose, CA, United States
 Berger, Jr., Donald E., San Jose, CA, United States
 Ullman, Edwin F., Atherton, CA, United States
 Behring Diagnostics GmbH, Marburg, Germany, Federal Republic of (non-U.S. corporation)

PATENT ASSIGNEE(S):

PATENT INFORMATION:
 APPLICATION INFO.: US 5840508 19981124
 RELATED APPL. INFO.: US 1995-455424 19950531 (8)
 Division of Ser. No. US 1993-154340, filed on 18 Nov 1993, now patented, Pat. No. US 5563038, which is a continuation of Ser. No. US 1992-879655, filed on 6 May 1992, now abandoned which is a division of Ser. No. US 1988-223501, filed on 25 Jul 1988, now patented, Pat. No. US 5116726, issued on 26 May 1992
 Utility
 Granted
 Green, Lora M.
 Lettereg, Theodore J.

DOCUMENT TYPE:
 FILE SEGMENT:
 PRIMARY EXAMINER:
 LEGAL REPRESENTATIVE:
 NUMBER OF CLAIMS:
 EXEMPLARY CLAIM:
 LINE COUNT:
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 SUPM extraction procedures in surfactant-based organized media containing micelles, inverse micelles, and microemulsions. After the preparative reaction has taken place, the destructible surfactant is converted to nonsurfactant products under mild conditions.

L4 ANSWER 9 OF 15 USPATFULL on STN
 ACCESSION NUMBER: 97:86796 USPATFULL Full-text
 TITLE: Compositions and methods for removal of detergents
 INVENTOR(S): Switchenko, Arthur C., Palo Alto, CA, United States
 Kurn, Nurith, Palo Alto, CA, United States
 Neukom, Christian, Mountain View, CA, United States
 Pfluo, Marcel, San Jose, CA, United States
 Berger, Jr., Donald E., San Jose, CA, United States
 Ullman, Edwin F., Atherton, CA, United States
 Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)

PATENT ASSIGNEE(S):

PATENT INFORMATION:
 APPLICATION INFO.: US 5670690 19970923
 RELATED APPL. INFO.: US 1995-455920 19950531 (8)
 Division of Ser. No. US 1993-154340, filed on 18 Nov 1993, now patented, Pat. No. US 5563038, which is a continuation of Ser. No. US 1992-879655, filed on 6 May 1992, now abandoned which is a division of Ser. No. US 1988-223501, filed on 25 Jul 1988, now patented, Pat. No. US 5116726, issued on 26 May 1992
 Utility
 Granted
 Chan, Nicky
 Lettereg, Theodore J., Peites, Rohan

DOCUMENT TYPE:
 FILE SEGMENT:
 PRIMARY EXAMINER:
 LEGAL REPRESENTATIVE:
 NUMBER OF CLAIMS:

6

EXEMPLARY CLAIM:

1

LINE COUNT: 962

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . extraction procedures in surfactant-based organized media containing micelles, inverse micelles, and microemulsions. After the preparative reaction has taken place, the destructible surfactant is converted to nonsurfactant products under mild conditions.

14 ANSWER 10 OF 15 USPATFULL on STM
ACCESSION NUMBER: 96:91958 USPATFULL Full-text

TITLE: Compositions and methods for removal of detergents
INVENTOR(S): Switchenko, Arthur C., Mountain View, CA, United States
Kurn, Nurith, Palo Alto, CA, United States
Neukom, Christian, Mountain View, CA, United States
Pirto, Marcel, San Jose, CA, United States
Berger, Jr., Donald E., San Jose, CA, United States
Ullman, Edwin F., Ahernston, CA, United States
Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)

PATENT ASSIGNEE(S):
NUMBER KIND DATE
US 5563038 19961008
US 1993-154340 19931118 (8)
Continuation of Ser. No. US 1992-879655, filed on 6 May 1992, now abandoned which is a division of Ser. No. US 1986-223501, filed on 25 Jul 1986, now patented, Pat. No. US 5116726, issued on 26 May 1992

DOCUMENT TYPE:

FILE SEGMENT:

PRIMARY EXAMINER:

LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

LINE COUNT:

1046
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . extraction procedures in surfactant-based organized media containing micelles, inverse micelles, and microemulsions. After the preparative reaction has taken place, the destructible surfactant is converted to nonsurfactant products under mild conditions.

14 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STM
ACCESSION NUMBER: 1997:9999 HCAPLUS Full-text
DOCUMENT NUMBER: 126:61852
TITLE: Preparation and characterization of a simple destructible surfactant
AUTHOR(S): West, Craig A.; Sanchez, Ana M.; Hanon-Aragon, Karen A.; Salazar, Idalia C.; Menger, Fredric M.
CORPORATE SOURCE: Dep. Chemistry, Emory Univ., Atlanta, GA, 30322, USA
SOURCE: Tetrahedron Letters (1996), 37(51), 9135-9138
CODEN: TETL; ISSN: 0040-4039
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 14
THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Preparation and characterization of a simple destructible surfactant

ST

prep'n characterization destructible surfactant
acetyldecyltrimethylammonium iodide; ammonium acetyldecyltrimethyl iodide
surfactant prep'n characterization

IT

(preparation and characterization of simple destructible surfactant (acetyldecyl)trimethylammonium iodide)
IT 22563-86-6P, 2-Acetyl-N,N-dimethylammonodecane
Rt: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation and characterization of simple destructible surfactant (acetyldecyl)trimethylammonium m iodide)

IT

185110-09-2P, (2-Acetyldecyl)trimethylammonium iodide
Rt: NOU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation and characterization of simple destructible surfactant (acetyldecyl)trimethylammonium iodide)
IT 112-12-9, 2-Undecanone 124-40-3, Dimethylamine, reactions 30525-89-4, Parafomaldehyde
Rt: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation and characterization of simple destructible surfactant (acetyldecyl)trimethylammonium m iodide)

14

ANSWER 12 OF 15 USPATFULL on STM
ACCESSION NUMBER: 93:109256 USPATFULL Full-text
TITLE: Destructible fluorinated alkoxyisilane surfactants and repellent coatings derived therefrom
INVENTOR(S): Pelletier, Mark J.; Woodbury, MN, United States
Jones, Richard R. M.; Woodbury, MN, United States
Minnesota Mining and Manufacturing Company, St. Paul, MN, United States (U.S. corporation)

PATENT ASSIGNEE(S):

LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

1365
PATENT INFORMATION: US 5274159 19931228
APPLICATION INFO.: US 1993-19069 19930218 (8)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Prescott, Arthur C.
LEGAL REPRESENTATIVE: Griswold, Gary L.; Kilm, Walter N.; Sherman, Lorraine R.

14 ANSWER 13 OF 15 USPATFULL on STM
ACCESSION NUMBER: 93:109256 USPATFULL Full-text
TITLE: Destructible fluorinated alkoxyisilane surfactants and repellent coatings derived therefrom
INVENTOR(S): Pelletier, Mark J.; Woodbury, MN, United States
Jones, Richard R. M.; Woodbury, MN, United States
Minnesota Mining and Manufacturing Company, St. Paul, MN, United States (U.S. corporation)

1365
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . layer on a substrate can provide the substrate with an oil- and water-repellent coating that is free of surfactant, the destructible surfactant comprising a fluorocarbylalkoxysilane having at least one polyfluorinated aliphatic group that is both hydrophobic and oleophobic and at least one . . .
Briefly, the present invention provides a destructible surfactant comprising a hydrophilic and a hydrophobic portion, the destructible surfactant comprising a fluorocarbylalkoxysilane comprising at least one polyfluorinated aliphatic or polyfluorinated ether group and at least one hydrophilic polyol, polyol . . .
. . . cure was seen for the dispersions using the stable surfactants only at low surfactant concentrations. The water repellency for the destructible surfactant delivered systems was improved

DETD

only at low surfactant concentrations. The water repellency for the destructible surfactant delivered systems was improved

to acceptable levels by curing the coating to drive the siloxane condensation to completion while leaving. . .

DETD Thus the advantages of a destructible surfactant in forming repellent coatings are 1) increased ambient cure oil repellency, 2) improved water repellency after heating, 3) less sensitivity. . .

CLM What is claimed is: . . . a polyoxallylene alcohol with a polyfluoroaliphatic halosilane, a polyfluoroaliphatic alkoxy silane, a polyfluoroaliphatic bis(halosilane), to provide a destructible surfactant.

24. The method according to claim 20 further comprising the step of hydrolyzing said destructible surfactant in the presence of a substrate so as to provide a water- and oil-repellent coating on said substrate or to. . .

L4 ANSWER 13 OF 15 USPATFULL on STN
ACCESSION NUMBER: 92:42652 - USPATFULL Full-text
TITLE: Methods for removal of detergents from analytes
INVENTOR(S): Switchenko, Arthur C.; Mountain View, CA, United States
Kurn, Nurith, Palo Alto, CA, United States
Neukom, Christian, Mountain View, CA, United States
Pirio, Marcel, San Jose, CA, United States
Berger, Jr., Donald E., San Jose, CA, United States
Ullman, Edwin F., Atherton, CA, United States
Syntax (U.S.A.) Inc., Palo Alto, CA, United States
(U.S. corporation)

PATENT ASSIGNEE(S):

NUMBER KIND DATE
US 5116726 19920526
US 1988-223501 19880725 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rosen, Sam
LEGAL REPRESENTATIVE: Leterey, Theodore J.

NUMBER OF CLAIMS: 52
EXEMPLARY CLAIM: 1

LINE COUNT: 1108

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . extraction procedures in surfactant-based organized media containing micelles, inverse micelles, and microemulsions. After the preparative reaction has taken place, the destructible surfactant is converted to nonsurfactant products under mild conditions.

L4 ANSWER 14 OF 15 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on

STN

ACCESSION NUMBER: 1985:135632 BIOSIS Full-text
DOCUMENT NUMBER: PREV198529029628; BR29:25628
TITLE: DESTRUCTIBLE SURFACTANT-BASED VESICLES FOR CONTROLLED DELIVERY.

AUTHOR(S): GOLICH T G (Reprint author); JAEGER D A
CORPORATE SOURCE: DEPARTMENT CHEMISTRY, UNIVERSITY WYOMING, LARAMIE, WYO 82071, USA

SOURCE: Journal of the American Oil Chemists' Society, (1985) Vol. 62, No. 4, pp. 612.
Meeting Info.: 76TH ANNUAL AOCs (AMERICAN OIL CHEMISTS' SOCIETY) MEETING, PHILADELPHIA, PA., USA, MAY 5-9, 1985. J AM OIL CHEM SOC.

CODEN: JAOCA7. ISSN: 0003-021X.
Conference; (Meeting)

DOCUMENT TYPE: BR
FILE SEGMENT: ENGLISH
LANGUAGE: ENGLISH
TITLE: DESTRUCTIBLE SURFACTANT-BASED VESICLES FOR CONTROLLED DELIVERY.

L4 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1984:412581 HCAPLUS Full-text
DOCUMENT NUMBER: 101:12581

TITLE: Design of microemulsions based on "destructible" surfactants for use in organic synthesis
AUTHOR(S): Martin, Craig A.; Golich, Timothy G.; Jaeger, David A.
CORPORATE SOURCE: Dep. Chem., Univ. Wyoming, Laramie, WY, 82071, USA
SOURCE: Journal of Colloid and Interface Science (1984), 99(2), 561-7
CODEN: JCISAS; ISSN: 0021-9797

DOCUMENT TYPE: Journal
LANGUAGE: English
ST microemulsion destructible surfactant org synthesis

=> s surfactant and ALS
L5 2351 SURFACTANT AND ALS

=> s 15 and trypsin or tryptic
L6 56514 L5 AND TRYPSIN OR TRYPTIC

=> s 15 and (trypsin or tryptic)
L7 1058 L5 AND (TRYPSIN OR TRYPTIC)

=> s 17 and propanesulfonate
L8 12 L7 AND PROPANESULFONATE

=> dup rem 18

PROCESSING COMPLETED FOR L8
L9 10 DUP REM L8 (2 DUPLICATES REMOVED)

=> d 19 1-10 1bib abs

L9 ANSWER 1 OF 10 USPATFULL on STN
ACCESSION NUMBER: 2007:49224 USPATFULL Full-text
TITLE: Sirtuin modulating compounds
INVENTOR(S): Nunes, Joseph J.; Andover, MA, UNITED STATES
Malne, Jill, Brookline, MA, UNITED STATES
Bemis, Jean, Arlington, MA, UNITED STATES
Xie, Roger, Southborough, MA, UNITED STATES
Vu, Chi B., Arlington, MA, UNITED STATES
Ng, Pui Yee, Boston, MA, UNITED STATES
Disch, Jeremy S., Natick, MA, UNITED STATES
Sirtis Pharmaceuticals, Inc., Cambridge, MA, UNITED STATES (U.S. corporation)

PATENT ASSIGNEE(S):

NUMBER KIND DATE
US 2007043050 A1 20070222
APPLICATION INFO.: US 2006-499919 A1 20060804 (11)

NUMBER DATE

PRIORITY INFORMATION: US 2005-705612P 20050804 (60)
US 2005-741783P 20051202 (60)
US 2006-779370P 20060303 (60)
US 2006-792276P 20060414 (60)

DOCUMENT TYPE: APPLICATION

FILE SEGMENT: FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US

LEGAL REPRESENTATIVE: 45

NUMBER OF CLAIMS: 1

EXEMPLARY CLAIM: 2 Drawing Page(s)

NUMBER OF DRAWINGS: 15181

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided herein are novel sirtuin-modulating compounds and methods of use thereof. The sirtuin-modulating compounds may be used for increasing the lifespan of a cell, and treating and/or preventing a wide variety of diseases and disorders including, for example, neurodegenerative diseases, to aging or stress, diabetes, obesity, neurodegenerative diseases, cardiovascular disease, blood clotting disorders, inflammation, cancer, and/or flushing as well as diseases or disorders that would benefit from increased mitochondrial activity. Also provided are compositions comprising a sirtuin-modulating compound in combination with another therapeutic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 10 USPTFULL on STN

ACCESSION NUMBER: 2007:43165 USPTFULL Full-text

TITLE: Sirtuin modulating compounds

INVENTOR(S): Nunez, Joseph J., Andover, MA, UNITED STATES
Malne, Jill, Brookline, MA, UNITED STATES
Bemis, Jean, Arlington, MA, UNITED STATES
Xie, Roger, Southborough, MA, UNITED STATES
Vu, Chi B., Arlington, MA, UNITED STATES
Ng, Pui Yee, Boston, MA, UNITED STATES
Disch, Jeremy S., Natick, MA, UNITED STATES
Sirtis Pharmaceuticals, Inc., Cambridge, MA, UNITED STATES (U.S. corporation)

PATENT ASSIGNEE(S):

NUMBER	KIND	DATE
US 2007037865	A1	20070215
US 2006-499920	A1	20060804 (11)

PATENT INFORMATION: APPLICATION INFO.: 11

PRIORITY INFORMATION: US 2005-705612P 20050804 (60)
US 2005-741783P 20051202 (60)
US 2006-779370P 20060303 (60)
US 2006-792276P 20060414 (60)

DOCUMENT TYPE: APPLICATION

FILE SEGMENT: FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US

LEGAL REPRESENTATIVE: 66

NUMBER OF CLAIMS: 1

EXEMPLARY CLAIM: 2 Drawing Page(s)

NUMBER OF DRAWINGS: 15878

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided herein are novel sirtuin-modulating compounds and methods of use thereof. The sirtuin-modulating compounds may be used for increasing the lifespan of a cell, and treating and/or preventing a wide variety of diseases and disorders including, for example, neurodegenerative diseases, to aging or stress, diabetes, obesity, neurodegenerative diseases, cardiovascular disease, blood clotting disorders, inflammation, cancer, and/or flushing as well as diseases or disorders that would benefit from increased mitochondrial activity. Also provided are compositions comprising a sirtuin-modulating compound in combination with another therapeutic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 10 USPTFULL on STN

ACCESSION NUMBER: 2007:43127 USPTFULL Full-text

TITLE: Sirtuin modulating compounds

INVENTOR(S): Nunez, Joseph J., Andover, MA, UNITED STATES
Malne, Jill, Brookline, MA, UNITED STATES
Bemis, Jean, Arlington, MA, UNITED STATES
Xie, Roger, Southborough, MA, UNITED STATES
Vu, Chi B., Arlington, MA, UNITED STATES
Ng, Pui Yee, Boston, MA, UNITED STATES
Disch, Jeremy S., Natick, MA, UNITED STATES
Sirtis Pharmaceuticals, Inc., Cambridge, MA, UNITED STATES (U.S. corporation)

PATENT ASSIGNEE(S):

NUMBER	KIND	DATE
US 2007037827	A1	20070215
US 2006-499239	A1	20060804 (11)

PATENT INFORMATION: APPLICATION INFO.: 11

PRIORITY INFORMATION: US 2005-705612P 20050804 (60)
US 2005-741783P 20051202 (60)
US 2006-779370P 20060303 (60)
US 2006-792276P 20060414 (60)

DOCUMENT TYPE: APPLICATION

FILE SEGMENT: FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US

LEGAL REPRESENTATIVE: 45

NUMBER OF CLAIMS: 1

EXEMPLARY CLAIM: 2 Drawing Page(s)

NUMBER OF DRAWINGS: 15360

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided herein are novel sirtuin-modulating compounds and methods of use thereof. The sirtuin-modulating compounds may be used for increasing the lifespan of a cell, and treating and/or preventing a wide variety of diseases and disorders including, for example, neurodegenerative diseases, to aging or stress, diabetes, obesity, neurodegenerative diseases, cardiovascular disease, blood clotting disorders, inflammation, cancer, and/or flushing as well as diseases or disorders that would benefit from increased mitochondrial activity. Also provided are compositions comprising a sirtuin-modulating compound in combination with another therapeutic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 10 USPTFULL on STN

ACCESSION NUMBER: 2007:43111 USPTFULL Full-text
TITLE: Sirtuin modulating compounds
INVENTOR(S): Nunes, Joseph J., Andover, MA, UNITED STATES
Miline, Jill, Brookline, MA, UNITED STATES
Bemis, Jean, Arlington, MA, UNITED STATES
Kie, Roger, Southborough, MA, UNITED STATES
Vu, Chi B., Arlington, MA, UNITED STATES
Ng, Pui Yee, Boston, MA, UNITED STATES
Disch, Jeremy S., Natick, MA, UNITED STATES
Salzman, Thomas, Warren, NJ, UNITED STATES
Armistead, David, Sudbury, MA, UNITED STATES
Sirtis Pharmaceuticals, Inc., Cambridge, MA, UNITED STATES (U.S. corporation)

PATENT ASSIGNEE(S):

PATENT INFORMATION:
APPLICATION INFO.:
US 2007037810 A1 20070215
US 2006-499901 A1 20060804 (11)

PRIORITY INFORMATION:
US 2005-705612P 20050804 (60)
US 2005-741783P 20051202 (60)
US 2006-779370P 20060303 (60)
US 2006-792276P 20060414 (60)

DOCUMENT TYPE:

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided herein are novel sirtuin-modulating compounds and methods of use thereof. The sirtuin-modulating compounds may be used for increasing the lifespan of a cell, and treating and/or preventing a wide variety of diseases and disorders including, for example, neurodegenerative diseases, to aging or stress, diabetes, obesity, neurodegenerative diseases, cardiovascular disease, blood clotting disorders, inflammation, cancer, and/or flushing as well as diseases or disorders that would benefit from increased mitochondrial activity. Also provided are compositions comprising a sirtuin-modulating compound in combination with another therapeutic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 10 USPTFULL on STN
ACCESSION NUMBER: 2007:43110 USPTFULL Full-text

TITLE:

INVENTOR(S): Sirtuin modulating compounds
Nunes, Joseph J., Andover, MA, UNITED STATES
Miline, Jill, Brookline, MA, UNITED STATES
Bemis, Jean, Arlington, MA, UNITED STATES
Kie, Roger, Southborough, MA, UNITED STATES
Vu, Chi B., Arlington, MA, UNITED STATES
Ng, Pui Yee, Boston, MA, UNITED STATES
Disch, Jeremy S., Natick, MA, UNITED STATES
Salzman, Thomas, Warren, NJ, UNITED STATES
Armistead, David, Sudbury, MA, UNITED STATES
Sirtis Pharmaceuticals, Inc., Cambridge, MA, UNITED STATES

PATENT ASSIGNEE(S):

STATES (U.S. corporation)
NUMBER KIND DATE
US 2007037810 A1 20070215
US 2006-499876 A1 20060804 (11)

PATENT INFORMATION:

APPLICATION INFO.:
US 2005-705612P 20050804 (60)
US 2005-741783P 20051202 (60)
US 2006-779370P 20060303 (60)
US 2006-792276P 20060414 (60)

DOCUMENT TYPE:

FILE SEGMENT:

LEGAL REPRESENTATIVE: APPLICATION
FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided herein are novel sirtuin-modulating compounds and methods of use thereof. The sirtuin-modulating compounds may be used for increasing the lifespan of a cell, and treating and/or preventing a wide variety of diseases and disorders including, for example, neurodegenerative diseases, to aging or stress, diabetes, obesity, neurodegenerative diseases, cardiovascular disease, blood clotting disorders, inflammation, cancer, and/or flushing as well as diseases or disorders that would benefit from increased mitochondrial activity. Also provided are compositions comprising a sirtuin-modulating compound in combination with another therapeutic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 6 OF 10 USPTFULL on STN
ACCESSION NUMBER: 2006:67440 USPTFULL Full-text

TITLE:

INVENTOR(S):

destructible surfactants and uses thereof
Bouvier, Edward S.P., Stow, MA, UNITED STATES
Compton, Bruce J., Lexington, MA, UNITED STATES
Gibler, John C., Hopkinton, MA, UNITED STATES
Gilar, Martin, Franklin, MA, UNITED STATES
Yu, Ying-Qing, Milford, MA, UNITED STATES
Lee, Peter Jeng-Jong, Westborough, MA, UNITED STATES
Brown, Elizabeth K., Sutton, MA, UNITED STATES
WATERS INVESTMENTS LIMITED, NEW CASTLE, GERMANY,
FEDERAL REPUBLIC OF (non-U.S. corporation)

PATENT ASSIGNEE(S):

NUMBER KIND DATE
US 2006057639 A1 20060316
US 2003-516418 A1 20030530 (10)
MO 2003-US16820 20050513 PCT 371 date

PATENT INFORMATION:

APPLICATION INFO.:

PRIORITY INFORMATION:
DOCUMENT TYPE: US 2002-385021P 20020531 (60)
FILE SEGMENT: Utility APPLICATION

LEGAL REPRESENTATIVE: EDWARDS & ANGELL, LLP, P.O. BOX 55874, BOSTON, MA, 02205, US

NUMBER OF CLAIMS: 70

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 13 Drawing Page(s)

LINE COUNT: 1376

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods for enhancing chemical reactions of molecules, e.g., biomolecules, with destructible surfactants. The chemical reactions may involve and/or be associated with analysis, e.g., solubilizing, separating, purifying and/or characterizing the molecules. In one aspect, the anionic surfactants of the present invention may be selectively broken up at relatively low pH. The resulting breakdown products of the surfactants may be removed from the molecule/sample with relative ease. The invention has applicability in a variety of analytical techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 7 OF 10 USPATFULL on STN

ACCESSION NUMBER: 2005:293509 USPATFULL Full-text

TITLE:

INVENTOR(S):

Propenoyl hydrazides
Powers, James C., Atlanta, GA, UNITED STATES
Asghari, Juliana, Fullerton, CA, UNITED STATES
Ekici, Ozlem Dogan, Columbus, OH, UNITED STATES
Gottz, Marion Gabriele, Hirschau, GERMANY, FEDERAL
REPUBLIC OF
James, Karen Ellis, Cumming, GA, UNITED STATES
Li, Zhao Zhao, Norcross, GA, UNITED STATES
Rukamp, Brian, Appleton, WI, UNITED STATES

NUMBER	KIND	DATE
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PATENT INFORMATION:	US 2005256058	A1	20051117
APPLICATION INFO.:	US 2005-62017	A1	20050218 (11)

NUMBER	DATE
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PRIORITY INFORMATION:	US 2004-545354P	20040218 (60)
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DOCUMENT TYPE:

FILE SEGMENT:

LEGAL REPRESENTATIVE:

UTILITY APPLICATION
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP, 100 GALLERIA
PARKWAY, NW, STE 1750, ATLANTA, GA, 30339-5948, US

NUMBER OF CLAIMS: 20

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s)

LINE COUNT: 4334

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present disclosure provides compositions for inhibiting proteases, methods for synthesizing the compositions, and methods of using the disclosed protease inhibitors. Aspects of the disclosure include a peptidyl propenoyl hydrazide compositions that inhibit proteases, for example cysteine proteases, either in vivo or in vitro.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2004:201567 HCAPLUS Full-text

DOCUMENT NUMBER: 141:345881

TITLE:

AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

PUBLISHER:

DOCUMENT TYPE:

LANGUAGE:

Acid-labile surfactant improves in-sodium
dodecyl sulfate polyacrylamide gel protein digestion
for matrix-assisted laser desorption/ionization mass
spectrometric peptide mapping
Nomura, Eiko; Katsura, Kazuhiko; Ueda, Tomoko;
Toriyama, Michinori; Mori, Tatsuya; Inagaki, Naoyuki
Division of Signal Transduction, Graduate School of
Biological Sciences, Nara Institute of Science and
Technology, Ikoma, 630-0192, Japan
Journal of Mass Spectrometry (2004), 39 (2), 202-207
CODEN: JMSPEF; ISSN: 1076-5174
John Wiley & Sons Ltd.
Journal
English

AB Mass spectrometry (MS) together with genome database searches serves as a powerful tool for the identification of proteins. In proteome anal., mixts. of cellular proteins are usually separated by sodium dodecyl sulfate (SDS) polyacrylamide gel-based two-dimensional gel electrophoresis (2-DE) or one-dimensional gel electrophoresis (1-DE), and in-gel digested by a specific protease. In-gel protein digestion is one of the critical steps for sensitive protein identification by these procedures. Efficient protein digestion is required for obtaining peptide peaks necessary for protein identification by MS. This paper reports a remarkable improvement of protein digestion in SDS polyacrylamide gels using an acid-labile surfactant, sodium 3-[(2-methyl-2-undecyl-1,3-dioxolan-4-yl)methoxy]-1-propanesulfonate (ALS). Pretreatment of gel pieces containing protein spots separated by 2-DE with a small amount of ALS prior to trypsin digestion led to increases in the digested peptides eluted from the gels. Consistently, treatment of gel pieces containing silver-stained standard proteins and those separated from tissue exs. resulted in the detection of increased nos. of peptide peaks in spectra obtained by matrix-assisted laser desorption/ionization time of flight mass spectrometry (MALDI-TOFMS). Hence the present protocol with ALS provides a useful strategy for sensitive protein identification by MS.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 10 MEDLINE on STN

ACCESSION NUMBER: 2003511852 MEDLINE Full-text

DOCUMENT NUMBER:

TITLE:

Enzyme-friendly, mass spectrometry-compatible
surfactant for in-solution enzymatic digestion of
proteins.

AUTHOR:

Yu Ying-Qing; Gilar Martin; Lee Peter J; Bouvier Edouard S
P; Gebler John C

CORPORATE SOURCE:

Life Sciences Research and Development, Waters Corporation,
34 Maple Street, Milford, Massachusetts 01757, USA.

Analytical chemistry, (2003 Nov 1) Vol. 75, No. 21, pp.
6023-8.

SOURCE: Journal code: 0370536. ISSN: 0003-2700.

PUB. COUNTRY:

DOCUMENT TYPE:

LANGUAGE: Journal/ Article/ (JOURNAL ARTICLE)

FILE SEGMENT:

ENTRY MONTH: English

ENTRY DATE: Priority Journals

200406

Entered STN: 1 Nov 2003

Last Updated on STN: 9 Jun 2004

Entered Medline: 8 Jun 2004

AB Improved in-solution tryptic digestion of proteins in terms of speed and peptide coverage was achieved with the aid of a novel acid-labile anionic surfactant (ALS). Unlike SDS, ALS solubilizes proteins without inhibiting

trypsin or other common endopeptidases activity. Trypsin activity was evaluated in the presence of various denaturants; little or no decrease in proteolytic activity was observed in 0.1M ALS solutions (w/v). Sample preparation prior to mass spectrometry and liquid chromatography analysis consists of sample acidification. ALS degrades rapidly at low-pH conditions, which eliminates surfactant-caused interference with analysis. Described methodology combines the advantages of protein solubilization, rapid digestion, high peptide coverages, and easy sample preparation for mass spectrometry and liquid chromatography analyses.

L9 ANSWER 10 OF 10 MEDLINE on STN
 ACCESSION NUMBER: 200237830 MEDLINE Full-text
 DOCUMENT NUMBER: PubMed ID: 12124938
 TITLE: Identification of proteins from two-dimensional polyacrylamide gels using a novel acid-labile surfactant.

AUTHOR: Ross Andrew R S; Lee Peter J; Smith Duncan L; Langridge James I; Whetton Anthony D; Gaskell Simon J
 CORPORATE SOURCE: National Research Council of Canada, Plant Biotechnology Institute, Saskatoon SK, Canada... andrew.r.ross@nrc.ca
 SOURCE: Proteomics, (2002 Jul) Vol. 2, No. 7, pp. 928-36. Journal code: 101092707. ISSN: 1615-9853.
 PUB. COUNTRY: Germany; Germany, Federal Republic of
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 200303
 ENTRY DATE: Entered STN: 19 Jul 2002
 Last Updated on STN: 19 Mar 2003
 Entered Medline: 18 Mar 2003

AB Protein identification by peptide mass mapping usually involves digestion of gel-separated proteins with trypsin, followed by mass measurement of the resulting peptides by matrix-assisted laser desorption/ionization mass spectrometry (MALDI-MS). Positive identification requires measurement of enough peptide masses to obtain a definitive match with sequence information recorded in protein or DNA sequence databases. However, competitive binding and ionization of residual surfactant introduced during polyacrylamide gel and ionization of residual surfactant introduced during polyacrylamide gel electrophoresis (PAGE) can inhibit solid-phase extraction and MS analysis of tryptic peptides. We have evaluated a novel, acid-labile surfactant (ALS) as an alternative to sodium dodecylsulfate (SDS) for two-dimensional (2-D) PAGE separation and MALDI-MS mapping of proteins. ALS was substituted for SDS at the same concentration in buffers and gels used for 2-D PAGE. Manual and automated procedures for spot cutting and in-gel digestion were used to process Coomassie stained proteins for MS analysis. Results indicate that substituting ALS for SDS during PAGE can significantly increase the number of peptides detected by MALDI-MS, especially for proteins of relatively low abundance. This effect is attributed to decomposition of ALS under acidic conditions during gel staining, destaining, peptide extraction and MS sample preparation. Automated excision and digestion procedures reduce contamination by keratin and other impurities, further enhancing MS identification of gel separated proteins.

=> d his full
 (FILE 'HOME' ENTERED AT 07:00:19 ON 24 APR 2007)

FILE 'HCAPLUS, USPATFULL, BIOSIS, MEDLINE' ENTERED AT 07:00:31 ON 24 APR 2007
 11 15 SEA DESTRUCTIBLE SURFACTANT
 12 0 SEA L1 AND PROPANESULFONATE
 13 0 SEA L1 AND ALS
 14 15 DUP REM L1 (0 DUPLICATES REMOVED)
 15 D L4 1-15 IBIB KWIC
 16 2351 SEA SURFACTANT AND ALS
 17 56514 SEA L5 AND TRYPsin OR TRYPTIC
 18 1058 SEA L5 AND (TRYPsin OR TRYPTIC)
 19 12 SEA L7 AND PROPANESULFONATE
 10 DUP REM L8 (2 DUPLICATES REMOVED)
 D L9 1-10 IBIB ABS

FILE HOME

FILE HCAPLUS

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FILE COVERS 1907 - 24 Apr 2007 VOL 146 ISS 18
 FILE LAST UPDATED: 23 Apr 2007 (20070423/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE USPATFULL
 FILE COVERS 1971 TO PATENT PUBLICATION DATE: 19 Apr 2007 (20070419/PD)
 FILE LAST UPDATED: 19 Apr 2007 (20070419/ED)
 HIGHEST GRANTED PATENT NUMBER: US7207069
 HIGHEST APPLICATION PUBLICATION NUMBER: US2007089214
 CA INDEXING IS CURRENT THROUGH 19 Apr 2007 (20070419/UPCA)
 ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 19 Apr 2007 (20070419/PD)
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2006
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2006

FILE BIOSIS
 FILE COVERS 1969 TO DATE.
 CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNS) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 18 April 2007 (20070418/ED)

FILE MEDLINE
 FILE LAST UPDATED: 21 Apr 2007 (20070421/UP). FILE COVERS 1950 TO DATE.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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	ENTRY	SESSION	
FULL ESTIMATED COST	60.17	60.38	
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	ENTRY	SESSION	
CA SUBSCRIBER PRICE	-3.90	-3.90	
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 DICTIONARY FILE UPDATES: 3 DEC 2006 HIGHEST RN 914612-67-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

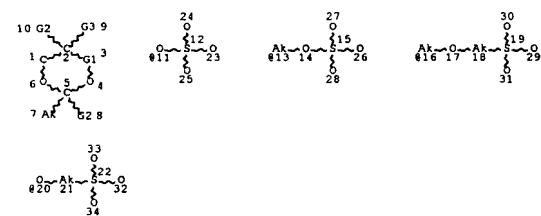
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 predicted properties as well as tags indicating availability of
 experimental property data in the original document. For information
 on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

L1 STR



REP G1=(0-2) CH2
 VAR G2=H/CH3
 VAR G3=11/13/16/20
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 CONNECT IS X2 RC AT 1
 DEFAULT MLEVEL IS ATOM
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE
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1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
 substance identification.

L5 41 L4

=> sel hit 15 1-41 rn
 E1 THROUGH E72 ASSIGNED

L5 ANSWER 1 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 21 Aug 2006
 ACCESSION NUMBER: 2006:826321 HCAPLUS Full-text
 DOCUMENT NUMBER: 145:418420
 TITLE: A Sulfurylation-Oxidation Protocol for the
 Preparation of Sulfates
 Huibers, M.; Manuzi, Alvaro; Rutjes, Floris P. J.
 T.; Van Delft, Floris L.
 CORPORATE SOURCE: Institute for Molecules and Materials Organic
 Chemistry, Radboud University Nijmegen, Nijmegen,
 6525 ED, Neth.
 SOURCE: Journal of Organic Chemistry (2006), 71(19),
 7473-7476
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A novel, high-yielding method for sulfation of alcs., proceeding via sulfite-
 and sulfate diester intermediates, has been developed. Sulfite diesters serve
 as versatile sulfate monoester precursors, allowing for transformations that
 are difficult or impossible with the latter compds.

IT 911829-50-OP
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
 RACT (Reactant or reagent)
 (preparation of sulfates via sulfurylation of alcs. followed by oxidation
 of sulfites and deesterification of sulfate diesters)

IT 911829-56-6P 911829-67-9P 911829-70-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of sulfates via sulfurylation of alcs. followed by oxidation
 of sulfites and deesterification of sulfate diesters)

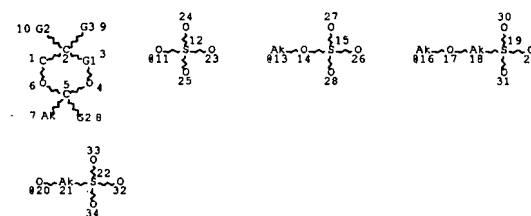
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L5 ANSWER 2 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 23 Mar 2006
 ACCESSION NUMBER: 2006:269477 HCAPLUS Full-text
 DOCUMENT NUMBER: 144:312289
 TITLE: Preparation of alkyl-substituted
 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and
 purine nucleoside analogs via condensation of the
 lactone to nucleosides as potential antiviral
 agents
 INVENTOR(S): Chun, Byoung-Kwon; Wang, Peiyuan
 PATENT ASSIGNEE(S): Pharmasset, Inc., USA
 SOURCE: PCT Int. Appl., 74 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1

3

L3

STR



REP G1=(0-2) CH2
 VAR G2=H/CH3
 VAR G3=11/13/16/20
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 CONNECT IS X2 RC AT 1
 DEFAULT MLEVEL IS ATOM
 GGCAT IS LOC AT 13
 GGCAT IS LOC AT 16
 GGCAT IS LOC AT 18
 GGCAT IS LOC AT 21
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 113 ITERATIONS 113 ANSWERS
 SEARCH TIME: 00.00.01

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FILE COVERS 1907 - 4 Dec 2006 VOL 145 ISS 24
 FILE LAST UPDATED: 3 Dec 2006 (20061203/ED)

2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006031725	A2	20060323	WO 2005-US32406	20050913
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SS, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM US 2006122146 A1 20060608 US 2005-225425 20050913 PRIORITY APPLN. INFO.: US 2004-609783P F 20040914 US 2004-610035P F 20040915 US 2005-666230P F 20050329				

OTHER SOURCE(S): MARPAT 144:312289
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for preparing of 2-deoxy-2-fluoro-2-methyl-D-ribofuranosyl, I,
 wherein R1 and R2 can independently be H, CH3, acetyl, benzoyl, pivaloyl, 4-
 nitrobenzoyl, 3-nitrobenzoyl, 2-nitrobenzoyl, 4-chlorobenzoyl, 3-
 chlorobenzoyl, 2-chlorobenzoyl, 4-methylbenzoyl, 3-methylbenzoyl, 2-
 methylbenzoyl, 4-phenylbenzoyl, benzyl, 4-methoxybenzyl, trityl,
 trialkylsilyl, t-butyl-diethylsilyl, t-butyl-diphenylsilyl, TIPDS, THP, MOM, or
 MEM are prepared and used in the condensation to 2-deoxy-2-fluoro-D-
 ribofuranosyl pyrimidine and purine nucleoside analogs. Thus, 2-deoxy-2-
 fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs II and III,
 wherein X is a halogen; Y is N or CH; Z is a halogen, hydroxyl, ether, thiol,
 thioether, (un)substituted amine or alkyl; R1' is alkyl, vinyl, ethynyl; R2'
 and R3' can be same or different H, alkyl, arylalkyl, acyl, cyclic acetal such
 as 2',3'-O-isopropylidene or 2',3'-O-benzylidene, or 2',3'-cyclic carbonate;
 R4, R5, and R6 are independently H, halogen, hydroxyl, ether, thiol,
 thioether, N3, (un)substituted amine, (un)substituted amido, alkyl,
 halogenated alkyl, alkenyl, halogenated alkenyl, alkynyl, halogenated alkynyl,
 hydroxy alkyl, alkoxy are prepared and are potential anti-HCV agents.
 Specifically, IV was prepared in 88 % yield via condensation, alkylation and
 stereoselective fluorination reactions and can exhibit potential use as an
 anti-HCV agent.

IT 879551-03-8P
 RL: IMP (Industrial manufacture); RCT (Reactant); SPN (Synthetic
 preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl
 pyrimidine and purine nucleoside analogs via condensation of the
 lactone to nucleosides)

IT 879551-05-0P
 RL: IMP (Industrial manufacture); SPN (Synthetic preparation); PREP

4

(Preparation)

(Preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides)

L5 ANSWER 3 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN

ED Entered STN: 03 Feb 2006

ACCESSION NUMBER: 2006:99537 HCAPLUS Full-text

DOCUMENT NUMBER: 144:327329

TITLE:

Analysis of Membrane Proteins from Human Chronic Myelogenous Leukemia Cells: Comparison of Extraction Methods for Multidimensional LC-MS/MS
Ruth, Mariah C.; Old, William M.; Emrick, Michelle A.; Meyer-Arendt, Karen; Aveline-Wolf, Lauren D.; Pierce, Kevin G.; Mendoza, Alex M.; Sevinsky, Joel R.; Hamady, Micah; Knight, Robin D.; Resing, Kathryn A.; Ahn, Natalie G.

AUTHOR(S):

CORPORATE SOURCE:

Yale University School of Medicine, New Haven, CT, 06510, USA

SOURCE:

Journal of Proteome Research (2006), 5(3), 709-719
CODEN: JPROB5; ISSN: 1535-3893

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB

An important strategy for "shotgun proteomics" profiling involves solution proteolysis of proteins, followed by peptide separation using multidimensional liquid chromatog. and automated sequencing by mass spectrometry (LC-MS/MS). Several protocols for extracting and handling membrane proteins for shotgun proteomics expts. have been reported, but few direct comparisons of different protocols have been reported. The authors compare four methods for preparing membrane proteins from human cells, using acid labile surfactants (ALS), urea, and mixed organic-aqueous solvents. These methods were compared with respect to their efficiency of protein solubilization and proteolysis, peptide and protein recovery, membrane protein enrichment, and peptide coverage of transmembrane proteins. Overall, approx. 50-60% of proteins recovered were membrane-associated, identified from Gene Ontol. annotations and transmembrane prediction software. Samples extracted with ALS, extracted with urea followed by dilution, or extracted with urea followed by desalting yielded comparable peptide recoveries and sequence coverage of transmembrane proteins. In contrast, suboptimal proteolysis was observed with organic solvent. Urea extraction followed by desalting may be a particularly useful approach, as it is less costly than ALS and yields satisfactory protein denaturation and proteolysis under conditions that minimize reactivity with urea-derived cyanate. Spectral counting was used to compare datasets of proteins from membrane samples with those of soluble proteins from K562 cells, and to estimate fold differences in protein abundances. Proteins most highly abundant in the membrane samples showed enrichment of integral membrane protein identifications, consistent with their isolation by differential centrifugation.

IT 308818-13-5, RapiGest

RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(extraction with; comparison of extraction methods for multidimensional LC-MS/MS anal. of membrane proteins from human chronic myelogenous leukemia cells)

REFERENCE COUNT:

41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

5

Regional Laboratory, Jagiellonian University, Krakow, 30-060, Pol.

SOURCE:

Rapid Communications in Mass Spectrometry (2004), 18(7), 822-826
CODEN: RCMSEF; ISSN: 0951-4198

PUBLISHER:

John Wiley & Sons Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB

RapiGest can serve as a useful and complementary tool for proteomic strategies, in a limited way, preferentially for digestion of proteins in solution. Acid-labile surfactant (ALS) is a long-chain derivative of 1,3-dioxolane sodium propyloxy sulfate which degrades at low pH.

IT 308818-13-5

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (acid-labile surfactant assists insoln. digestion of proteins resistant to enzymic attack)

REFERENCE COUNT:

7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN

ED Entered STN: 07 Apr 2004

ACCESSION NUMBER: 2004:284338 HCAPLUS Full-text

DOCUMENT NUMBER: 141:101782

TITLE:

A complete peptide mapping of membrane proteins: a novel surfactant aiding the enzymatic digestion of bacteriorhodopsin

AUTHOR(S):

Yu, Ying-Qing; Giler, Martin; Gebler, John C.

CORPORATE SOURCE:

Milford, MA, 01757, USA

SOURCE:

Rapid Communications in Mass Spectrometry (2004), 18(6), 711-715
CODEN: RCMSEF; ISSN: 0951-4198

PUBLISHER:

John Wiley & Sons Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB

Here we report a simplified method for tryptic digestion of membrane protein BR using RapiGestTM SF, an acid-labile surfactant (ALS). This surfactant is known to facilitate rapid in-solution enzymic digestion of protein substrates without inhibiting endopeptidase activity. We demonstrate a complete peptide mapping of BR utilizing ALS solns. for membrane protein digestion. As little as 0.7 µg of sample was used for the LC/MS anal. The sample preparation is fast, simple, and efficient for both LC/MS and MALDI-TOF-MS analyses.

IT 308818-13-5

RL: BSU (Biological study, unclassified); BIOL (Biological study) (surfactant aiding enzymic digestion of bacteriorhodopsin for peptide mapping)

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN

ED Entered STN: 12 Mar 2004

ACCESSION NUMBER: 2004:201567 HCAPLUS Full-text

DOCUMENT NUMBER: 141:345881

TITLE:

Acid-labile surfactant improves in-sodium dodecyl sulfate polycrylamide gel protein digestion for matrix-assisted laser desorption/ionization mass spectrometric peptide mapping

AUTHOR(S):

Homma, Eiko; Katsura, Kazuhiko; Ueda, Tomoko; Toriyama, Michinori; Mori, Tatsuya; Inagaki,

L5 ANSWER 4 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN

ED Entered STN: 09 Dec 2005

ACCESSION NUMBER: 2005:1291827 HCAPLUS Full-text

DOCUMENT NUMBER: 144:33889

TITLE:

A method for the rapid analysis of polypeptides
Ilan, Mahamad Asif; Bowden, Donald Keith; Boyesen, Reinhard; Ingemar, Hearn, Wilton Thomas William
Monash University, Australia

PATENT ASSIGNEE(S):

PCT Int. Appl., 163 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005116607	A1	20051208	WO 2005-AU755	20050527
W:	AZ, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SV, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VE, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, NE, NA, SD, SL, SS, TZ, UG, ZM, ZW, AM, AE, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			AU 2004-902922	A 20040527
			AU 2004-903001	A 20040603

AB The invention provides improved sample preparation techniques as well as improved methods of anal. of samples. The techniques include a method of preparing a sample of MALDI-TOF anal. comprising applying a material having a liquid component to a carrier, removing at least a portion of the liquid component, and applying a MALDI matrix over the material to be analyzed. In other embodiments, the sample preparation techniques include digestion of peptides prior to anal. by MALDI-TOF, which may be done in the presence of a surfactant, and sandwiching a sample for anal. between layers of MALDI matrix on a sample carrier.

IT 308818-13-5

RL: NUU (Other use, unclassified); USES (Uses)

(method for rapid anal. of polypeptides)

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN

ED Entered STN: 19 Apr 2004

ACCESSION NUMBER: 2004:316306 HCAPLUS Full-text

DOCUMENT NUMBER: 141:221087

TITLE:

Acid-labile surfactant assists insoln. digestion of proteins resistant to enzymic attack

AUTHOR(S):

Suder, Piotr; Bierzynska, Anna; Koenig, Simone;

CORPORATE SOURCE:

Silbering, Jerzy

Neurobiochemistry Group, Faculty of Chemistry and

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Naoyuki

CORPORATE SOURCE:

Division of Signal Transduction, Graduate School of Biological Sciences, Nara Institute of Science and Technology, Ikoma, 630-0192 Japan

SOURCE:

Journal of Mass Spectrometry (2004), 39(2), 202-207
CODEN: JMSPFJ; ISSN: 1076-5174

PUBLISHER:

John Wiley & Sons Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB

Mass spectrometry (MS) together with genome database searches serves as a powerful tool for the identification of proteins. In proteome anal., mixts. of cellular proteins are usually separated by sodium dodecyl sulfate (SDS) polyacrylamide gel-based two-dimensional gel electrophoresis (2-DE) or one-dimensional gel electrophoresis (1-DE), and in-gel digested by a specific protease. In-gel protein digestion is one of the critical steps for sensitive protein identification by these procedures. Efficient protein digestion is required for obtaining peptide peaks necessary for protein identification by MS. This paper reports a remarkable improvement of protein digestion in SDS polyacrylamide gels using an acid-labile surfactant, sodium 3-[(2-methyl-2-undecyl-1,3-dioxolan-4-yl)methoxy]-1-propanesulfonate (ALS). Pretreatment of gel pieces containing protein spots separated by 2-DE with a small amount of ALS prior to trypsin digestion led to increases in the digested peptides eluted from the gels. Consistently, treatment of gel pieces containing silver-stained standard proteins and those separated from tissue exts. resulted in the detection of increased nos. of peptide peaks in spectra obtained by matrix-assisted laser desorption/ionization time of flight mass spectrometry (MALDI-TOFMS). Hence the present protocol with ALS provides a useful strategy for sensitive protein identification by MS.

IT 308818-13-5

RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(acid-labile surfactant improves in-sodium dodecyl sulfate polycrylamide gel protein digestion for matrix-assisted laser desorption/ionization mass spectrometric peptide mapping)

REFERENCE COUNT:

29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN

ED Entered STN: 14 Dec 2003

ACCESSION NUMBER: 2003:972310 HCAPLUS Full-text

DOCUMENT NUMBER: 140:17749

TITLE:

Deconstructible surfactants and use in small molecule analysis

INVENTOR(S):

Mallet, Claude; Russel, Reb J., II; Yardley, Kurt

PATENT ASSIGNEE(S):

Waters Investments Limited, USA

SOURCE:

PCT Int. Appl., 45 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102536	A2	20031211	WO 2003-US16819	20030530
WO 2003102536	A2	20040902		
W:	AZ, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,			

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10/516418

LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
 NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TG, UG, ZM, ZW, AM, AZ,
 BY, KG, KE, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
 NE, SN, TD, TG

AU 2003234681 A1 20031219 AU 2003-234681 20030530
 US 2006094000 A1 20060504 US 2005-516419 20050829
 PRIORITY APPLN. INFO.: US 2002-385018P P 20020531

WO 2003-US16819 W 20030530

OTHER SOURCE(S): MARPAT 140:17749
 AB The anionic surfactants have a dioxolane or dioxane functional group that enable degradation of the surfactant under acidic conditions. Using the anionic surfactants in a variety of anal. applications relates to samples containing small mols.
 IT 308818-10-2P 308818-11-3P
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)
 IT 308818-13-5P
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (surfactant; anionic surfactants used in small mol. detection)

L5 ANSWER 9 OF 41 HCAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 14 Dec 2003
 ACCESSION NUMBER: 2003:972250 HCAPLUS Full-text
 DOCUMENT NUMBER: 140:25191
 TITLE: Destructible surfactants and uses thereof
 INVENTOR(S): Bouvier, Edouard S. P.; Copton, Bruce John; Gebler, John C.; Giler, Martin; Yu, Ying-Qing; Lee, Peter Jeng Jong; Brown, Elizabeth K.
 PATENT ASSIGNEE(S): Waters Investments Limited, USA
 SOURCE: PCT Int. Appl., 60 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102225	A1	20031211	WO 2003-US16820	20030530
W: AR, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BE, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DS, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TG, UG, ZM, ZW, AM, AZ, BY, KG, KE, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003234682	A1	20031219	AU 2003-234682	20030530

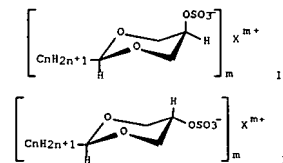
9

10/516418

ACCESSION NUMBER: 2003:346818 HCAPLUS Full-text
 DOCUMENT NUMBER: 138:323055
 TITLE: Manufacture of novel sulfate salts of cis- and trans-2-alkyl-5-hydroxy-1,3-dioxanes
 INVENTOR(S): Piascki, Andrzej; Burczyk, Bogdan; Sokolowski, Adam; Kotlowska, Urszula
 PATENT ASSIGNEE(S): Politechnika Wroclawska, Pol.
 SOURCE: Pol., 6 pp.
 CODEN: POXXA7
 DOCUMENT TYPE: Patent
 LANGUAGE: Polish
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 177120	B1	19990930	PL 1995-308929	19950602
PRIORITY APPLN. INFO.:			PL 1995-308929	19950602

OTHER SOURCE(S): MARPAT 138:323055
 GI



AB Surface-active title salts (I and II; X = Li, K, Cs, Mg, Ca, Ba, ammonium, pyridinium; m = 1, 2; n = 7-13) were manufactured by reacting the parent cis- and/or trans-2-(C7-13-alkyl)-5-hydroxy-1,3-dioxanes with ClSO3H in CCl4 in the presence of pyridine, or with SO3/pyridine complex, then removing the solvent and neutralizing the residue with aqueous alc. solution or suspension of alkali metal or alkaline earth metal hydroxide, carbonate or bicarbonate, or NH4OH. For example, adding 0.0464 mol of SO3/pyridine complex at ambient temperature in portions to a stirred solution of 0.0387 mol of a mixture of cis- and trans-2-undecyl-5-hydroxy-1,3-dioxane in 0.070 dm3 CCl4 and 2 + 10-3 dm3 pyridine, stirring the mixture for 1 h at ambient temperature and 6-8 h at approx. 310°K gave 89% mol.% of a mixture of cis- and trans-2-undecyl-1,3-dioxane-5-sulfate pyridinium salts, m. 372-376°K and having Krafft point <293° (1% aqueous solution).
 IT 512203-78-0P 512203-80-4P 512203-82-6P
 512203-84-8P 512203-86-0P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (cis- and trans-isomer mixture; manufacture of novel sulfate salts of cis- and trans-alkyl(hydroxy)dioxanes)
 IT 259738-92-6P 259738-94-8P 512203-89-3P

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10/516418

US 2006057659 A1 20060316 US 2005-516418 20050513
 PRIORITY APPLN. INFO.: US 2002-385021P P 20020531

WO 2003-US16820 W 20030530

AB The present invention provides methods for enhancing chemical reactions of mols., e.g., biomols., with destructible surfactants. The chemical reactions may involve and/or be associated with anal., e.g., solubilizing, separating, purifying and/or characterizing the mols. In one aspect, the anionic surfactants of the present invention may be selectively broken up at relatively low pH. The resulting breakdown products of the surfactants may be removed from the mol./sample with relative ease. The invention has applicability in a variety of anal. techniques.
 IT 308818-13-5P 308818-14-6P
 RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
 (destructible surfactants and uses thereof)
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 41 HCAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 24 Sep 2003
 ACCESSION NUMBER: 2003:747140 HCAPLUS Full-text
 DOCUMENT NUMBER: 139:377421
 TITLE: Enzyme-friendly, mass spectrometry-compatible surfactant for in-solution enzymatic digestion of proteins
 AUTHOR(S): Yu, Ying-Qing; Giler, Martin; Lee, Peter J.; Bouvier, Edouard S. P.; Gebler, John C.
 CORPORATE SOURCE: Life Sciences Research and Development, Waters Corporation, Milford, MA, 01757, USA
 SOURCE: Analytical Chemistry (2003), 75(21), 6023-6028
 CODEN: ANCHAM; ISSN: 0003-2700
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Improved in-solution tryptic digestion of proteins in terms of speed and peptide coverage was achieved with the aid of a novel acid-labile anionic surfactant (ALS). Unlike SDS, ALS solubilizes proteins without inhibiting trypsin or other common endopeptidases activity. Trypsin activity was evaluated in the presence of various denaturants; little or no decrease in proteolytic activity was observed in 0.1-1% ALS solns. (w/v). Sample preparation prior to mass spectrometry and liquid chromatog. anal. consists of sample acidification. ALS degrades rapidly at low-pH conditions, which eliminates surfactant-caused interference with anal. Described methodol. combines the advantages of protein solubilization, rapid digestion, high peptide coverages, and easy sample preparation for mass spectrometry and liquid chromatog. analyses.
 IT 308818-13-5
 RL: ARU (Analytical role, unclassified); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent)
 (enzyme-friendly, mass spectrometry-compatible surfactant for in-solution enzymic digestion of proteins)
 REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 41 HCAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 08 May 2003
 10

10/516418

512204-29-4P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (manufacture of novel sulfate salts of cis- and trans-alkyl(hydroxy)dioxanes)

L5 ANSWER 12 OF 41 HCAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 27 Mar 2003
 ACCESSION NUMBER: 2003:237291 HCAPLUS Full-text
 DOCUMENT NUMBER: 140:2466
 TITLE: Sodium dodecyl sulfate versus acid-labile surfactant gel electrophoresis: Comparative proteomic studies on rat retina and mouse brain
 AUTHOR(S): Konig, Simone; Schmidt, Oliver; Rose, Karin; Thanos, Solon; Besselmann, Michael; Jeller, Martin
 CORPORATE SOURCE: Integrated Functional Genomics, Interdisciplinary Clinical Research Center, University Eye Hospital Munster, University of Munster, Germany
 SOURCE: Electrophoresis (2003), 24(4), 751-756
 CODEN: ELCTDN; ISSN: 0173-0835
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A long-chain derivative of 1,3-dioxolane sodium propyloxy sulfate, with similar denaturing and electrophoretic properties as SDS, and facilitated protein identification following polyacrylamide gel electrophoresis (PAGE) for Coomassie-stained protein bands, has been tested. Comparative acid-labile surfactant/sodium dodecyl sulfate two-dimensional (ALS/SDS 2-D)-PAGE expts. of lower abundant proteins from the proteomes of regenerating rat retina and mouse brain show that peptide recovery for mass spectrometry (MS) mapping is significantly enhanced using ALS leading to more successful database searches. ALS may influence some procedures in proteomic anal. such as the determination of protein content and methods need to be adjusted to that effect. The promising results of the use of ALS in bioanalytics call for detailed physicochem. investigations of surfactant properties.
 IT 308818-13-5
 RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
 (comparative proteomic studies on rat retina and mouse brain using SDS vs. acid-labile surfactant gel electrophoresis)
 REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 13 OF 41 HCAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 04 Aug 2002
 ACCESSION NUMBER: 2002:577434 HCAPLUS Full-text
 DOCUMENT NUMBER: 137:291147
 TITLE: Identification of proteins from two-dimensional polyacrylamide gels using a novel acid-labile surfactant
 AUTHOR(S): Rose, Andrew R. S.; Lee, Peter J.; Smith, Duncan L.; Langridge, James I.; Whetton, Anthony D.; Gaskell, Simon J.
 CORPORATE SOURCE: Plant Biotechnology Institute, National Research Council of Canada, Saskatoon, SK, S7N 0W9, Can.
 SOURCE: Proteomics (2002), 2(7), 928-936
 CODEN: PROTC7; ISSN: 1615-9853
 PUBLISHER: Wiley-VCH Verlag GmbH
 DOCUMENT TYPE: Journal
 LANGUAGE: English

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AB Protein identification by peptide mass mapping usually involves digestion of gel-separated proteins with trypsin, followed by mass measurement of the resulting peptides by matrix-assisted laser desorption/ionization mass spectrometry (MALDI-MS). Pos. identification requires measurement of enough peptide masses to obtain a definitive match with sequence information recorded in protein or DNA sequence databases. However, competitive binding and ionization of residual surfactant introduced during PAGE (PAGE) can inhibit solid-phase extraction and MS anal. of tryptic peptides. We have evaluated a novel, acid-labile surfactant (ALS) as an alternative to sodium dodecylsulfate (SDS) for two-dimensional (2-D) PAGE separation and MALDI-MS mapping of proteins. ALS was substituted for SDS at the same concentration in buffers and gels used for 2-D PAGE. Manual and automated procedures for spot cutting and in-gel digestion were used to process Coomassie stained proteins for MS anal. Results indicate that substituting ALS for SDS during PAGE can significantly increase the number of peptides detected by MALDI-MS, especially for proteins of relatively low abundance. This effect is attributed to decomposition of ALS under acidic conditions during gel staining, destaining, peptide extraction and MS sample preparation. Automated excision and digestion procedures reduce contamination by keratin and other impurities, further enhancing MS identification of gel separated proteins.

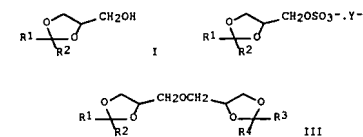
IT 308818-13-5P
 RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (identification of proteins from two-dimensional polyacrylamide gels using novel acid-labile surfactant)
 REFERENCE COUNT: 48
 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 14 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 23 Jan 2002
 ACCESSION NUMBER: 2002:59114 HCAPLUS Full-text
 DOCUMENT NUMBER: 136:249430
 TITLE: Winsor-type microemulsions stabilized by mixtures of surfactants
 AUTHOR(S): Zielonka, Barbara; Sokolowski, Adam
 CORPORATE SOURCE: Wroclaw University of Technology, Wroclaw, Pol.
 SOURCE: World Surfactants Congress, 5th, Firenze, Italy, May 29-June 2, 2000 (2000), 852-860. Comite European des Agents de Surface et leurs Intermediaires Organiques: Brussels, Belg.
 CODEN: 69BYUW
 DOCUMENT TYPE: Conference; (computer optical disk)
 LANGUAGE: English

AB We have undertaken investigations upon the behavior in Winsor microemulsion systems of surfactant mixts. Sodium n-alkyl sulfates, sulfonates, carboxylates, acetal-type surfactants and fluorinated amphiphiles-sodium carboxylate, fluorinated sugar-type derivative were used as addnl. surface-active agents, called "second surfactants". They were added to systems containing n-heptane, water, sodium diethylhexylsulfosuccinate (AOT) and NaCl in order to obtain transition from water-in-oil microemulsions (Winsor II) to oil-in-water ones (Winsor I). From interfacial tension measurements we determined the regions where Winsor I, Winsor II, and Winsor III occur and calculated the standard free energy of transition, ΔG_{tr} , from the Winsor I to the Winsor III system. Addnl., the ΔG_{tr} contributions derived from all structural parts of the second surfactant mol., i.e. CH₂, CF₂, head group, were estimated

IT 139888-69-0 139888-70-3 139888-72-5
 186189-03-7 186189-04-8 186189-05-9
 186189-06-0

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AB Diglycerin, HOCH₂CH(OH)OCH₂CH(OH)CH₂OH, is prepared by reaction of glycerin ketal or acetal (I; R₁, R₂ = H, hydrocarbyl; or R₁ and R₂ are linked to each other to form a carbo cyclic ring) glycerin ketal or acetal sulfate salt (II; R₃, R₄ = H, hydrocarbyl; or R₃ and R₄ are linked to each other to form a carbo cyclic ring; Y = salt-forming cation) to give diglycerin ketal or acetal (III; R₁, R₂, R₃, R₄ = H, hydrocarbyl; or R₁ and R₂ or R₃ and R₄ are linked to each other to form a carbo cyclic ring) followed by deacetalization or deketalization. This process gives diglycerin of high purity which is useful as food additive or an intermediate for nonionic surfactants. Thus, 116.9 g glycerin Me Et ketone ketal, 20 mL pyridine, and 500 mL CCl₄ were heated to 45° in a flask, followed by adding portionwise 127.3 g 803-pyridine complex over a period of 3 h, and the resulting mixture was neutralized by adding 66.7 g 48% aqueous NaOH, 260 g H₂O, and 900 g ethanol and evaporated to remove the solvent to give 219.9 g II (R₃ = Et, R₄ = Me, Y = Na⁺). The latter product and 116.9 g glycerin Me Et ketone ketal were added to a flask, followed by adding 66.7 g 48% aqueous NaOH and 650 mL xylene, and the resulting mixture was refluxed for etherification with azeotropic removal of water for 16 h to give 97.9 g III (R₁ = R₃ = Et, R₂ = R₄ = Me). The latter compound (60 g) was treated with p-toluenesulfonic acid and 3-5% steam per h was introduced with removing excess steam and Me Et ketone outside the system for 5 h and the resulting mixture was dehydrated at 90° and 6.66 kPa for 0.5 to give 41.0 g diglycerin (97.9% purity).

IT 311820-48-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of diglycerin by etherification diglycerin ketal or acetal and its sulfate and deacetalization or deketalization of diglycerin ketal or acetal)

L5 ANSWER 17 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 30 Nov 2000
 ACCESSION NUMBER: 2000:835474 HCAPLUS Full-text
 DOCUMENT NUMBER: 134:27503
 TITLE: Preparation of degradable sulfonate surfactants
 AUTHOR(S): Zhu, Hong-jun; Wang, Jin-tang; Xu, Feng; Kong, Ai-wu
 CORPORATE SOURCE: Department of Allied Chemistry, Nanjing University of Chemical Technology, Nanjing, 210009, Peop. Rep. China
 SOURCE: Jingxi Huagong (2000), 17(10), 559-561, 566
 CODEN: JIHUFJ; ISSN: 1003-5214
 PUBLISHER: Jingxi Huagong Bianjibu
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB A series of degradable sulfonate surfactants(III) [sodium 3-[(2-heptyl-1,3-dioxolan-4-yl) methoxy]-1-propanesulfonate; sodium 3-[(2-nonyl-1,3-dioxolan-4-

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RL: FRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (Winsor-type microemulsions stabilized by mixts. of surfactants)
 REFERENCE COUNT: 12
 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 26 Sep 2001
 ACCESSION NUMBER: 2001:699311 HCAPLUS Full-text
 DOCUMENT NUMBER: 136:202175
 TITLE: Decomposition properties of sodium 3-[(2-alkyl-1,3-dioxolan-4-yl)methoxy]-1-propanesulfonates
 AUTHOR(S): Zhu, Hong-jun; Wang, Jin-tang; Xu, Feng
 CORPORATE SOURCE: School of Science, Nanjing University of Chemical Technology, Nanjing, 210009, Peop. Rep. China
 SOURCE: Jingxi Huagong (2001), 18(8), 443-444, 460
 CODEN: JIHUFJ; ISSN: 1003-5214
 PUBLISHER: Jingxi Huagong Bianjibu
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB The decomposition properties of sodium 3-[(2-alkyl-1,3-dioxolan-4-yl)methoxy]-1-propanesulfonates [alkyl = heptyl (NDMPS), nonyl (NDMPS), undecyl (UDMPS)] in 0.1 mol/L HCl solution (25°) were measured by gas chromatog. The kinetics investigation showed that the decomposition reaction of these surfactants is pseudo-first-order. Their rate constant k and half-life t_{1/2}(h):NDMPS 0.638, NDMPS 0.827, UDMPS 0.936.

IT 333952-53-7 333952-54-8 333952-55-9
 RL: FRP (Properties); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
 (decomposition properties of sodium 3-[(2-alkyl-1,3-dioxolan-4-yl)methoxy]-1-propanesulfonates as anionic surfactants)

L5 ANSWER 16 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 12 Dec 2000
 ACCESSION NUMBER: 2000:865356 HCAPLUS Full-text
 DOCUMENT NUMBER: 134:29655
 TITLE: Method for preparation of diglycerin from diglycerin ketal of acetal derivatives
 INVENTOR(S): Murata, Daiya; Imanaka, Takehiro; Nagumo, Hiroshi
 PATENT ASSIGNEE(S): Kao Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 200034705	A2	20001212	JP 1999-157970	19990604
PRIORITY APPLN. INFO.:			JP 1999-157970	19990604

OTHER SOURCE(S): CASREACT 134:29655; MARPAT 134:29655
 GI

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yl) methoxy]-1-propanesulfonate; sodium 3-[(undecyl-1,3-dioxolan-4-yl) methoxy]-1-propanesulfonate] with 1,3-dioxolane ring were prepared by three steps. (a) a series of acetals (I) were prepared by reaction of aldehydes and tri-*tert*-butoxide at 8-10° under the catalysis of ammonium nitrate (50% yield), (b) the cyclic glycerol acetals(II) were prepared by transacetalation of I with glycerol at 110° (80% yield), (c) then the intermediates II reacted with inner ester of 3-hydroxypropanesulfonic acid and sodium hydroxide at 60-65° for 8 h to give III (90% yield). The structure identification was performed using elementary anal., IR and ¹HNMR.

IT 333952-53-7P 333952-54-8P 333952-55-9P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (degradable sulfonate surfactants; preparation of)

L5 ANSWER 18 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 24 Nov 2000
 ACCESSION NUMBER: 2000:824508 HCAPLUS Full-text
 DOCUMENT NUMBER: 134:2339
 TITLE: Destructible surfactants and uses thereof
 INVENTOR(S): Lee, Peter Jeng Jong; Compton, Bruce J.
 PATENT ASSIGNEE(S): Waters Investments Ltd., USA
 SOURCE: PCT Int. Appl., 50 pp.
 CODEN: PIIKX2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000070334	A1	20001123	WO 2000-US13028	20000512
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, GU, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ZA, ZY, ZG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BG, CF, CG, CI, CH, CN, CU, GW, GU, HK, HR, HU, ID, IL, IN, AU 2000048435				
EP 1181537	A1	20020227	EP 2000-930651	20000512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			US 1999-134113P	P 19990514
			WO 2000-US13028	W 20000512

OTHER SOURCE(S): MARPAT 134:2339
 AB Destructible surfactants and methods of using same are provided. The invention includes anionic surfactants having a dioxolane or dioxane functional group which enables the surfactant to be broken down under acidic conditions. The invention also includes methods of making anionic surfactants and methods of using anionic surfactants in a variety of applications.

IT 138487-18-0 308818-17-9
 RL: NUU (Other use, unclassified); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
 (destructible surfactants and uses thereof)

IT 138487-16-9P 308818-10-2P 308818-11-3P
 308818-13-5P 308818-14-6P 308818-15-7P

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RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(destructible surfactants and uses thereof)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 19 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
ED Entered STN: 26 Apr 2000
ACCESSION NUMBER: 2000:270652 HCAPLUS Full-text
DOCUMENT NUMBER: 133:336886
TITLE: Synthesis and surface properties of chemodegradable anionic surfactants: diastereomeric (2-n-alkyl-1,3-dioxan-5-yl) sulfates with monovalent counter-ions. [Erratum to document cited in CA132:196127]
AUTHOR(S): Flasecki, Andrzej; Mayhew, Alexandra
CORPORATE SOURCE: Institute of Organic and Polymer Technology, Wroclaw University of Technology, Wroclaw, 50-370, Pol.
SOURCE: Journal of Surfactants and Detergents (2000), 3(2), 237
CODEN: JSDEFL; ISSN: 1097-3958
PUBLISHER: AOCSS Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The captions for Figs. 2 and 3 were switched; the corrected figures and their corresponding captions are given.
IT 186189-03-7P 186189-04-8P 186189-05-9P
186189-06-0P 259738-90-4P 259738-91-5P
259738-92-6P 259738-93-7P 259738-94-8P
259738-95-9P 259738-96-0P 259738-97-1P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis and surface properties of chemodegradable diastereomeric (alkyldioxanyl) sulfate anionic surfactants with monovalent counter-ions (Erratum))

L5 ANSWER 20 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
ED Entered STN: 23 Jan 2000
ACCESSION NUMBER: 2000:51525 HCAPLUS Full-text
DOCUMENT NUMBER: 132:196127
TITLE: Synthesis and surface properties of chemodegradable anionic surfactants: diastereomeric (2-n-alkyl-1,3-dioxan-5-yl) sulfates with monovalent counter-ions
AUTHOR(S): Flasecki, Andrzej; Mayhew, Alexandra
CORPORATE SOURCE: Institute of Organic and Polymer Technology, Wroclaw University of Technology, Wroclaw, 50-370, Pol.
SOURCE: Journal of Surfactants and Detergents (2000), 3(1), 59-65
CODEN: JSDEFL; ISSN: 1097-3958
PUBLISHER: AOCSS Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Sodium, potassium and ammonium cis- and trans-2-n-alkyl-1,3-dioxan-5-yl sulfates 6-8 (alkyl: n-C9H19, 6a-8a, and n-C11H23, 6b-8b) were synthesized in a reaction of aliphatic aldehydes 1a,b with glycerol 2 followed by separation in high yields of individual geometric isomers of cis- and trans-2-n-alkyl-5-

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of I (n = 0, 1; A1 = A2 = OH). Thus, 2-undecanone was condensed with glycerin and sulfated to give I (R1 = nonyl, R2 = Me, n = 0, A1 = OSO3Na) (II) showing critical micelle concentration 1.0×10^{-2} mol/L, surface tension (at the critical micelle concentration) 39.6 mN/m, and Krafft point (1%) <0°. II was completely decomposed by 1.0 N HCl at 25° for 1 h.
IT 251453-51-7P 251453-53-9P
RL: PRP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(preparation and acid decomposition of dioxolanes as (intermediates for) surfactants)
IT 251453-54-0P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation and acid decomposition of dioxolanes as (intermediates for) surfactants)
L5 ANSWER 22 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
ED Entered STN: 28 Sep 1999
ACCESSION NUMBER: 1999:619226 HCAPLUS Full-text
DOCUMENT NUMBER: 132:238708
TITLE: Synthesis and properties of sulfate- and polyoxyethylene-type chemodegradable surfactants bearing a 1,3-dioxolane ring
AUTHOR(S): Yamamura, Shingo; Ono, Daijuku; Nakamura, Masaki; Shizuma, Motohiro; Tamai, Toshiyuki; Tekeda, Tokuji
CORPORATE SOURCE: Osaka Munic. Tech. Res. Inst., Osaka, 536-8553, Japan
SOURCE: Kagaku to Kogyo (Osaka) (1999), 73(9), 419-425
CODEN: KKGQAG; ISSN: 0368-5918
PUBLISHER: Osaka Koken Kyokai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Chemodegradable anionic and nonionic surfactants bearing a 1,3-dioxolane ring were prepared by the acid-catalyzed condensation of ketones and glycerol, followed by sulfation or ethoxylation. These surfactants had good surface activity and detergency, and were easily hydrolyzed under acidic conditions.
IT 251453-51-7P, (2-Methyl-2-nonyl-1,3-dioxolan-4-yl)methyl sulfate sodium salt 261963-60-4P, (2-Methyl-2-undecyl-1,3-dioxolan-4-yl)methyl sulfate sodium salt
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(anionic surfactant; preparation of chemodegradable surfactants bearing dioxolane ring)

L5 ANSWER 23 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
ED Entered STN: 16 Jun 1999
ACCESSION NUMBER: 1999:371434 HCAPLUS Full-text
DOCUMENT NUMBER: 131:134992
TITLE: Adsorption of Diastereomerically Pure sodium cis- and trans-(2-n-alkyl-1,3-dioxan-5-yl) Sulfates at the n-Heptane-Water Interface
AUTHOR(S): Sokolowski, Adam; Zielonka, Barbara; Flasecki, Andrzej; Wilk, Kazimiera A.; Burczyk, Bogdan
CORPORATE SOURCE: Institute of Organic and Polymer Technology, Wroclaw University of Technology, Wroclaw, 50-370, Pol.
SOURCE: Journal of Physical Chemistry B (1999), 103(26), 5512-5516

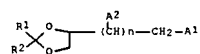
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hydroxy-1,3-dioxanes, cis-3a,b and trans-3a,b, followed by sulfation with sulfur trioxide-pyridine complex, and finally neutralization with NaOH, KOH, and NH4OH, resp. Phys. data of the compds. and some surface properties of 2-n-nonyl derivs., such as critical micelle concentration (CMC), effectiveness of aqueous surface tension reduction (ITCMC), surface excess concentration (ΓCMC), and the surface area demand per mol. (ACMC), were determined. It was shown that the surface activity of these compds. is influenced both by their geometric structure and by the monovalent counter-ion.
IT 186189-03-7P 186189-04-8P 186189-05-9P
186189-06-0P 259738-90-4P 259738-91-5P
259738-92-6P 259738-93-7P 259738-94-8P
259738-95-9P 259738-96-0P 259738-97-1P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis and surface properties of chemodegradable diastereomeric (alkyldioxanyl) sulfate anionic surfactants with monovalent counter-ions)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 21 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
ED Entered STN: 08 Dec 1999
ACCESSION NUMBER: 1999:774192 HCAPLUS Full-text
DOCUMENT NUMBER: 132:13333
TITLE: Dioxolanes as (intermediates for) surfactants, their preparation, and acid decomposition
INVENTOR(S): Nakamura, Masaki; Nomura, Hiroshi; Miyamoto, Masanori; Hasegawa, Akira
PATENT ASSIGNEE(S): Osaka City, Japan; Teshima Kaken K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKKXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11335371	A2	19991207	JP 1998-138241	19980520
JP 3049390	B2	20000605	JP 1998-138241	19980520

GI



AB Dioxolanes I (R1 = Ra(ORb); Ra = C6-22 alkyl, alkenyl, alkynyl, (substituted) aryl; Rb = C2-4 alkylene; y = 0-20; R2 = Me, Et; n = 0, 1; A1, A2 = OH, OSO3M; M = H, alkali metal, alkaline earth metal, ammonium, C2-3 alkanolammonium, C1-5 alkylammonium, basic amino acid residue), which are decomposed into ketones, glycerin, erythritol, etc. by treatment with acids, are prepared by sulfation

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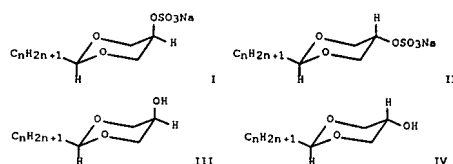
CODEN: JPCBFX; ISSN: 1089-5647
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A systematic study concerning adsorption and aggregation of chemodegradable, diastereomerically pure Na cis- and trans-(2-n-alkyl-1,3-dioxan-5-yl) sulfates (alkyl: n-C9H19 and n-C11H23) in the system consisting of n-heptane in contact with aqueous 0.2M NaCl at 31° was undertaken. The role of the 6-membered 1,3-dioxane ring was discussed in terms of comparison between studied surfactants and classical Na decyl and dodecyl sulfates. Surface parameters of compds. under study at the oil-H2O interface, i.e., surface tension reduction (X), surface excess concentration (Γ), surface area demand per mol. (A), critical micelle concentration (cmc), standard free energy of adsorption (ΔGads), and of micellization (ΔGcmc), show differences due to the adsorption and interfacial tensions of diastereomerically pure sodium cis- and trans-(alkyl dioxan-yl) sulfates at heptane-aqueous NaCl systems and to the hydrophilic, i.e., sulfate group configuration at the C-5 atom of the 1,3-dioxane ring. The cmc, ΔGads, and ΔGcmc values are lower for the trans isomers than for the cis ones, whereas the effectiveness of surface tension reduction is nearly the same for both isomers. Addnl., the interfacial tensions of the studied acetal-type isomers were described for the heptane-aqueous NaCl systems containing Aerosol OT. According to findings the configuration of the -OSO3Na polar group at the C-5 atom of the 1,3-dioxane ring, i.e., equatorial in trans isomers and axial in cis isomers, involves diastereomeric differentiation in the aggregation abilities.
IT 186189-03-7 186189-04-8 186189-05-9
186189-06-0
RL: PRP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(adsorption and interfacial tensions of diastereomerically pure sodium cis- and trans-(alkyldioxan-yl) sulfates at heptane-water interface)
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 24 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
ED Entered STN: 19 May 1999
ACCESSION NUMBER: 1999:304333 HCAPLUS Full-text
DOCUMENT NUMBER: 130:311801
TITLE: Preparation of novel sodium sulfates of 1,3-dioxane derivatives
INVENTOR(S): Flasecki, Andrzej; Burczyk, Bogdan; Sokolowski, Adam; Kotowska, Urszula
PATENT ASSIGNEE(S): Politechnika Wroclawska, Pol.
SOURCE: Pol., 4 pp.
CODEN: POXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 175563	B1	19990129	PL 1994-306516	19941223
PRIORITY APPLN. INFO.:			PL 1994-306516	19941223

OTHER SOURCE(S): MARPAT 130:311801

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AB The title compds. [I or II; n = 7-13], potentially useful as surfactants (no data), were prepared by reacting cis-(or trans)-2-alkyl-5-hydroxy-1,3-dioxanes [III or IV] with ClSO₃H in CC14 in the presence of pyridine followed by treatment of the intermediate with alc.-H₂O solution of NaOH, Na₂CO₃ or NaHCO₃ or by reacting III or IV with CSH₅N⁺SO₃ in CC14 followed by treatment of the intermediate with alc.-aqueous solution of NaOH, Na₂CO₃ or NaHCO₃.

IT 186189-03-7P 186189-06-0P 223537-63-1P
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 (preparation of novel sodium sulfates of 1,3-dioxane derivs.)

L5 ANSWER 25 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 31 Dec 1997
 ACCESSION NUMBER: 1997:808663 HCAPLUS Full-text
 DOCUMENT NUMBER: 126:63186
 TITLE: Chemical structure and surface activity. XXXII. Synthesis and surface properties of chemodegradable surfactants: sodium cis-[(2-n-alkyl-5-methyl-1,3-dioxan-5-yl)methyl] sulfates
 AUTHOR(S): Piasecki, Andrzej; Burczyk, Bogdan; Sokolowski, Adam; Mayhew, Aleksandra; Wilk, Kazimiera A.
 CORPORATE SOURCE: INSTITUTE OF ORGANIC AND POLYMER TECHNOLOGY, TECHNICAL UNIVERSITY OF WROCLAW, WROCLAW, 50-370, Pol.
 SOURCE: Bulletin of the Polish Academy of Sciences, Chemistry (1997), 45(3), 329-337
 CODEN: BPACQ; ISSN: 0239-7285
 PUBLISHER: Polish Academy of Sciences
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Sodium cis-[(2-n-alkyl-5-methyl-1,3-dioxan-5-yl)methyl] sulfates (alkyl: n-C7H15, n-C9H19 and n-C11H23) were synthesized by reaction of aliphatic aldehydes and 1,1,1-tris(hydroxymethyl)ethane, followed by sulfation with sulfur trioxide-pyridine complex and neutralization with NaHCO₃ (NaOH) of the intermediate mixts. of cis- and trans-2-n-alkyl-5-hydroxymethyl-5-methyl-1,3-dioxanes or individual cis-isomers. Some of their surface properties at the aqueous solution-air interface were determined

IT 139888-69-0P 139888-70-3P 139888-72-5P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material)

21

CORPORATE SOURCE: Bogdan; Gancarz, Roman; Kotowska, Urszula
 Institute of Organic and Polymer Technology and Institute of Organic Chemistry Biochemistry and Biotechnology, Technical University of Wroclaw, Wroclaw, 50-370, Pol.
 SOURCE: Langmuir (1997), 13(6), 1434-1439
 CODEN: LANGD5; ISSN: 0743-7463
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A systematic study concerning the synthesis, adsorption, micellization, and hydrolytic decomposition of new, chemodegradable and diastereomerically pure sodium cis- and trans-2-n-alkyl-1,3-dioxan-5-yl sulfates (alkyl: n-C7H15, n-C9H19, and n-C11H23) has been undertaken. Surface parameters of the compds. under study at the aqueous solution/air interface, i.e., surface tension reduction, surface excess concentration, surface area demand per mol., and standard free energy of adsorption and micellization, show differences both in the alkyl chain length and in the hydrophilic, i.e., sulfate, group configuration at the 1,3-dioxane ring. The cmc values are lower for the trans-isomers than for the cis-isomers, the ΔG^{ads} and ΔG^{cmc} values are lower for trans-isomers, and the effectiveness of surface tension reduction is higher for the cis-isomers than for the trans-isomers. The investigated compds. undergo an easy hydrolysis reaction of the acetal function, leading to starting aldehydes and sulfated glycerol. The trans-isomers are hydrolyzed much faster than cis-isomers, and no isomerization reaction of the type cis ↔ trans is observed during the hydrolysis process.

IT 186189-01-5P 186189-02-6P 186189-03-7P
 186189-04-8P 186189-05-9P 186189-06-0P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis, surface properties, and hydrolysis of chemodegradable sodium cis- and trans-2-n-alkyl-1,3-dioxan-5-yl sulfate anionic surfactants)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 28 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 08 Feb 1997
 ACCESSION NUMBER: 1997:91830 HCAPLUS Full-text
 DOCUMENT NUMBER: 126:119361
 TITLE: Chemical structure and activity. XXX. Synthesis and surface properties of chemodegradable anionic surfactants: sodium [(2-n-alkyl-1,3-dioxan-5-yl)sulfates]
 AUTHOR(S): Piasecki, Andrzej; Sokolowski, Adam; Burczyk, Bogdan; Kotowska, Urszula
 CORPORATE SOURCE: Inst. Organic Polymer Technology, Technical Univ. Wroclaw, Wroclaw, 50-370, Pol.
 SOURCE: Journal of the American Oil Chemists' Society (1997), 74(1), 33-37
 CODEN: JAOCA7; ISSN: 0003-021X
 PUBLISHER: AOCS Press
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB In the reaction of cis- and trans-2-n-alkyl-5-hydroxy-1,3-dioxane mixts. with SO₃pyridine complex, followed by neutralization with NaOH or Na₂CO₃, a new group of anionic surfactants, i.e., Na cis- and trans-(2-n-alkyl-1,3-dioxan-5-yl)sulfates were obtained. The hydrophobic intermediates used in the sulfation reaction were obtained in high yields from 4-component glycerol acetals by the process of transacetalization and selective crystallization of

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use); PREP (Preparation); USES (Uses)
 (synthesis and surface properties of chemodegradable sodium cis-[(2-n-alkyl-5-methyl-1,3-dioxan-5-yl)methyl] sulfate surfactants)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 26 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 06 Sep 1997
 ACCESSION NUMBER: 1997:569475 HCAPLUS Full-text
 DOCUMENT NUMBER: 127:308641
 TITLE: Synthesis, surface properties, and hydrolysis of chemodegradable anionic surfactants: diastereomerically pure cis- and trans-2,5-disubstituted-1,3-dioxanes
 AUTHOR(S): Piasecki, Andrzej; Sokolowski, Adam; Burczyk, Bogdan; Gancarz, Roman; Kotowska, Urszula
 CORPORATE SOURCE: Institute Organic Polymer Technology, Technical University Wroclaw, Wroclaw, 50-370, Pol.
 SOURCE: Journal of Colloid and Interface Science (1997), 192(1), 74-82
 CODEN: JCISAS; ISSN: 0021-9797
 PUBLISHER: Academic
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Two new groups of anionic surfactants, sodium cis- and trans-(2-n-undecyl-1,3-dioxan-5-yl)methyl sulfates and sodium cis- and trans-3-[(2-n-undecyl-1,3-dioxan-5-yl)oxy]propanesulfonates, were synthesized and investigated. Surface properties of these surfactants, i.e., surface excess concentration, Γ, surface area demand per mol., A, effectiveness of surface tension reduction, Π, critical micelle concentration, CMC, and standard free energies of adsorption, ΔG^{ads}, and of micellization, ΔG^{mic}, were determined. The trans-isomers, in which the configuration of the polar group is equatorial, are more surface active than the cis-isomers with axial configuration of the polar group at the C-5 carbon atom of the 1,3-dioxane ring. The surfactants under study undergo easy hydrolysis reaction in DCI/D₂O solution with cleavage of the 1,3-dioxane ring to nonsurface active intermediates. The trans-isomers are hydrolyzed faster than the cis-isomers.

IT 197294-67-0P 197294-68-1P 197294-69-2P
 197294-70-3P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (synthesis, surface properties, and hydrolysis of diastereomerically pure cis- and trans-2,5-disubstituted-1,3-dioxane anionic surfactants)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 27 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 11 Mar 1997
 ACCESSION NUMBER: 1997:164886 HCAPLUS Full-text
 DOCUMENT NUMBER: 126:145606
 TITLE: Synthesis, Surface Properties, and Hydrolysis of Chemodegradable Anionic Surfactants: Diastereomerically Pure Sodium cis- and trans-2-n-Alkyl-1,3-dioxan-5-yl Sulfates
 AUTHOR(S): Piasecki, Andrzej; Sokolowski, Adam; Burczyk,

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1,3-dioxane derivs. The phys. data of the new compds. and some of their surface properties, such as critical micelle concentration, effectiveness of water surface tension reduction, standard free energies of adsorption and micellization, surface excess concentration, and the surface area demand per mol. were determined. The surface activity of the standard anionic surfactant Na dodecyl sulfate should be similar to the surface activity of Na (2-n-decyl-1,3-dioxan-5-yl)sulfate.

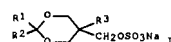
IT 186302-97-6P, 2-Octyl-1,3-dioxolan-5-yl sulfate sodium salt
 186302-98-7P, 2-Decyl-1,3-dioxolan-5-yl sulfate sodium salt
 186302-99-8P, 2-Dodecyl-1,3-dioxolan-5-yl sulfatesodium salt
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and surface properties of chemodegradable anionic surfactants sodium (alkyldioxan-5-yl)sulfates)

L5 ANSWER 29 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 14 Jul 1995
 ACCESSION NUMBER: 1995:673889 HCAPLUS Full-text
 DOCUMENT NUMBER: 123:59616
 TITLE: Manufacturing surface-active sodium sulfate derivatives of 2,5-di- and 2,2,5-trisubstituted 5-hydroxymethyl-1,3-dioxanes
 INVENTOR(S): Piasecki, Andrzej; Burczyk, Bogdan
 PATENT ASSIGNEE(S): Politechnika Wroclawska, Pol.
 SOURCE: 5 PP
 CODEN: POKX7
 DOCUMENT TYPE: Patent
 LANGUAGE: Polish
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 162441	B1	19931231	PL 1990-283199	19900103
PRIORITY APPLN. INFO.:			PL 1990-283199	19900103

OTHER SOURCE(S): MARPAT 123:59616

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AB Title surfactants I (R1 = CnH2n+1, Ph, or CnH2b+1C6H4, a = 5-15, b = 1-12, R2 = H or CnH2c+1, c = 1-8, R1R2 = CnH2d, d = 5-12, R3 = Me or Et) are manufactured by reaction of the corresponding hydroxymethylidioxane with CSH₅N and ClSO₃H in a solvent such as CC14 at 260-320K and dioxane derivative-ClSO₃H-CSH₅N mol ratio 1:(1-1.1):(2.1-2.5) or with a CSH₅N-SO₃ complex (II) in a solvent such as CC14 at dioxane derivative-II mol ratio 1:(1-1.1) and 260-320K, evaporation of the reaction mixture, dissoln. of the evaporated product in an aqueous alc. solution of NaOH, NaHCO₃, or Na₂CO₃, and evaporation of the solvent.

IT 143482-00-2P 143482-02-4P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (manufacturing surface-active sodium sulfate derivs. of 2,5-di- and

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L5 ANSWER 30 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 16 Apr 1994
 ACCESSION NUMBER: 1994:194530 HCAPLUS Full-text
 DOCUMENT NUMBER: 120:194530
 TITLE: Studies on synthesis and properties of surfactants with specific functions
 AUTHOR(S): Yamamura, Shingo
 CORPORATE SOURCE: Osaka Munic. Tech. Res. Inst., Osaka, 536, Japan
 SOURCE: Yukagaku (1994), 43(1), 2-9
 CODEN: YKGMAM; ISSN: 0513-398X
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 AB Novel surfactants with specific functions were synthesized from inexpensive, com. available bulk chems. by convenient synthetic methods. All were characterized by features such as chemical degradability, catalytic activity for a halide displacement reaction (Finkelstein reaction), ability to disperse lime soap, and complex with alkali metal cations. Applications for emulsion polymerization, surface-active properties, stability constns. of complexes with alkali metal ions, and solubilization of alkali metal picrates in organic solvents were studied.
 IT 138487-16-8P 138487-17-9P 138487-18-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and surfactant properties of)

L5 ANSWER 31 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 04 Oct 1992
 ACCESSION NUMBER: 1992:533335 HCAPLUS Full-text
 DOCUMENT NUMBER: 117:133335
 TITLE: Chemical structure and surface activity. XXV. Synthesis and surface properties of chemodegradable anionic surfactants: sodium salts of sulfated 2-n-alkyl-5-hydroxymethyl-5-methyl-1,3-dioxanes
 AUTHOR(S): Sokolowski, Adam; Piasecki, Andrzej; Burczyk, Bogdan
 CORPORATE SOURCE: Inst. Org. Polym. Technol., Tech. Univ. Wroclaw, Wroclaw, 50-370, Pol.
 SOURCE: Journal of the American Oil Chemists' Society (1992), 69(7), 633-8
 CODEN: JAOCA7; ISSN: 0003-021X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB In acid-catalyzed reactions of Cn-alkanecarboxaldehydes (n = 5, 7, 9, 11) with MeC(CH₂O)₃, 2-(n-alkyl)-5-(hydroxymethyl)-5-methyl-1,3-dioxanes were obtained. The dioxanes were sulfated with SO₃-pyridine complex in dry CCl₄ solution to obtain the title anionic surfactants. The surfactants could be readily hydrolyzed and oxidized to nonsurfactant compds. Phys. data and some surface properties, such as Krafft point, critical micelle concentration (CMC), surface tension of aqueous solution near CMC, and wetting and foaming properties, were determined. The surfactants exhibited aqueous solution properties similar to those of the well-known [R(OCH₂CH₂)₂OSO₃Na]. The presence of the 5-methyl-1,3-dioxane moiety in the mols. introduced hydrophobic character comparable to the effect of three oxyethylene groups or of two methylene groups of the alkyl chain in [R(OCH₂CH₂)₂OSO₃Na] with equal R value.
 IT 143481-99-6P 143482-00-2P 143482-01-3P
 143482-02-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)

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AB cis-, trans- Or a mixture of cis- and trans-(hydroxymethyl)dioxanes I [R = 4-MeC₆H₄, Me(CH₂)₆, Me(CH₂)₈, Me(CH₂)₁₀, R₁ = H] were sulfated with sulfur trioxide-pyridine complex in CCl₄/pyridine to give I (R₁ = SO₃Na) as the pure cis- or trans-isomers.
 IT 139888-69-0P 139888-70-3P 139888-71-4P
 139888-72-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 L5 ANSWER 34 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 21 Feb 1992
 ACCESSION NUMBER: 1992:62074 HCAPLUS Full-text
 DOCUMENT NUMBER: 116:62074
 TITLE: Synthesis and properties of destructible anionic surfactants with a 1,3-dioxolane ring and their use as emulsifier for emulsion polymerization
 AUTHOR(S): Yamamura, Shingo; Nakamura, Masaki; Kasai, Kiyoshi; Sato, Horumi; Takeda, Tokuji
 CORPORATE SOURCE: Osaka Munic. Tech. Res. Inst., Osaka, 536, Japan
 SOURCE: Yukagaku (1991), 40(11), 1002-6
 CODEN: YKGMAM; ISSN: 0513-398X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Degradable anionic surfactants with a 1,3-dioxolane ring were prepared and their surface properties determined. These surfactants contain a sulfonate group as the anionic hydrophilic, and readily decompose under weakly acidic conditions. As surfactants for emulsion polymerization reactions, they are considerably superior to the conventional surfactants which give polymers containing higher contents of metals than the above surfactants.
 IT 138487-16-8P 138487-17-9P 138487-18-0P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (surfactants, preparation and surface properties of)

L5 ANSWER 35 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 23 Jun 1990
 ACCESSION NUMBER: 1990:235732 HCAPLUS Full-text
 DOCUMENT NUMBER: 112:235732
 TITLE: An efficient route to 3-deoxy-D-manno-2-octulosonic acid (KDO) derivatives via a 1,4-cyclic sulfate approach
 AUTHOR(S): Van der Klein, P. A. M.; Boons, G. J. P. H.; Veeneman, G. H.; Van der Marel, G. A.; Van Boom, J. H.
 CORPORATE SOURCE: Gorlaeus Lab., Leiden, 2300 RA, Neth.
 SOURCE: Tetrahedron Letters (1989), 30(40), 5477-80
 CODEN: TETLEY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 112:235732
 GI

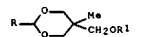
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L5 ANSWER 32 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 31 May 1992
 ACCESSION NUMBER: 1992:215135 HCAPLUS Full-text
 DOCUMENT NUMBER: 116:215135
 TITLE: Preparation of butadiene copolymers with low metal content
 INVENTOR(S): Kasai, Kiyoshi; Sato, Horumi; Takeda, Tokuji
 PATENT ASSIGNEE(S): Yamamura, Shingo; Nakamura, Masaki
 SOURCE: Japan Synthetic Rubber Co., Ltd., Japan; Osaka, City of
 Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

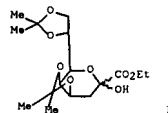
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03281602	A2	19911212	JP 1990-81148	19900330
PRIORITY APPLN. INFO.:			JP 1990-81148	19900330

AB The title polymers having metal content ≤200 ppm, and useful in the electronic applications, are prepared by emulsion polymerization in the presence of acid-hydrolyzable surfactants bearing 1,3-dioxolane rings. Thus, emulsion polymerization of 65 parts butadiene with 35 parts acrylonitrile in the presence of 2 parts 2-methyl-2-undecyl-3-carboxy-5-methyl-1,3-dioxolane Na salt (I), and 0.01 part Na hydroxymethanesulfonate and treating the resulting polymer emulsions with 1% HCl gave polymers containing 15 ppm Na, vs 120 for polymers prepared without I.
 IT 141186-39-2
 RL: USES (Uses)
 (surfactants, for manufacture of butadiene copolymers with low metal content)

L5 ANSWER 33 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 17 Apr 1992
 ACCESSION NUMBER: 1992:151685 HCAPLUS Full-text
 DOCUMENT NUMBER: 116:151685
 TITLE: Acetals and ethers. XXI. Preparation of diastereomerically pure sodium salts of sulfated 2-n-alkyl-5-hydroxymethyl-5-methyl-1,3-dioxanes
 AUTHOR(S): Piasecki, Andrzej
 CORPORATE SOURCE: Inst. Org. Polym. Technol., Tech. Univ. Wroclaw, Wroclaw, 50-370, Pol.
 SOURCE: Synthetic Communications (1992), 22(3), 445-51
 CODEN: SYNCAY; ISSN: 0039-7911
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 116:151685
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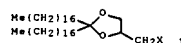


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AB Treatment of 2,3:5,6-di-O-isopropylidene-D-mannitol with thionyl chloride followed by oxidation gave the resp. 1,4-cyclic sulfate. Ring opening of the cyclic sulfate with the anion of Et 1,3-dithiane-2-carboxylate, and subsequent acidolysis and unmasking of the thioketal, afforded KDO derivative I in an excellent yield.
 IT 127244-79-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and hydrolysis of)

L5 ANSWER 36 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 30 Apr 1989
 ACCESSION NUMBER: 1989:156549 HCAPLUS Full-text
 DOCUMENT NUMBER: 110:156549
 TITLE: Preparation and characterization of glycerol-based cleavable surfactants and derived vesicles
 AUTHOR(S): Jaeger, David A.; Jamrozik, Janusz; Golich, Timothy G.; Clennan, Malgorzata Wegrzyn; Mohebbian, Jamshid
 CORPORATE SOURCE: Dep. Chem., Univ. Wyoming, Laramie, WY, 82071, USA
 SOURCE: Journal of the American Chemical Society (1989), 111(8), 3001-6
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB Vesicles of I [X = N+Me₃ MeSO₃⁻ (II); X = N+Me₃ Br⁻ (III); and X = O(CH₂)₃SO₃⁻ Na⁺ (IV)] were prepared by sonication and characterized by 1H NMR line width narrowing, dynamic laser light scattering, DSC, and dye entrapment and leakage studies. In vesicular form, the hydrolytic stability of IV was greater than that of II/III, due to a combination of electrostatic effects resulting from the different substituents on the dioxolane ring. Neutral organic compds. could be readily isolated from vesicular solns. of IV after its hydrolysis. Thus, IV was appropriate for the application of vesicular media to preparative chemical I (X = N+Me₂(CH₂)₃SO₃⁻) was prepared but did not readily disperse in water upon sonication.
 IT 119296-62-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

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10/516418

RACT (Reactant or reagent)
 (preparation and hydrolysis of)
 L5 ANSWER 37 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 12 May 1984
 ACCESSION NUMBER: 1981:107200 HCAPLUS Full-text
 DOCUMENT NUMBER: 98:107200
 TITLE: Cyanine dyes, new potent antitumor agents
 AUTHOR(S): Minami, Isao; Kozai, Yoshio; Nomura, Hiroaki;
 Tashiro, Tazuko
 CORPORATE SOURCE: Cent. Res. Div., Takeda Chem. Ind. Ltd., Osaka,
 532, Japan
 SOURCE: Chemical & Pharmaceutical Bulletin (1982), 30(9),
 3106-20
 CODEN: CPBTAL; ISSN: 0009-2363
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 98:107200
 AB A number of cyanines with mono-, di- and tricyclic nuclei, merocyanines and
 oxonols were prepared and screened for antitumor activity against P388
 leukemia and B16 melanoma. Among these compounds, monomethin-, trimethin- and
 pentamethincyanines having naphthothiazole, naphthoxazole, and benzindole
 nuclei significantly prolonged the survival time of tumor-bearing mice.
 Replacement of the conjugated chain system between the 2 nuclei with a
 saturated aliphatic chain produced a marked decrease in the antitumor
 activity. Structure-activity relationships are discussed.
 IT 84834-19-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
 RACT (Reactant or reagent)
 (preparation and reaction of, with methylnaphthothiazolium salt)
 IT 84846-66-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
 RACT (Reactant or reagent)
 (preparation and reaction of, with methylnaphthothiazolium salt)
 IT 84833-76-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
 RACT (Reactant or reagent)
 (preparation and reaction of, with naphthothiazoles)
 L5 ANSWER 38 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 12 May 1984
 ACCESSION NUMBER: 1976:407606 HCAPLUS Full-text
 DOCUMENT NUMBER: 85:7606
 TITLE: Dioxolane derivatives having surfactant properties
 INVENTOR(S): McCoy, David R.
 PATENT ASSIGNEE(S): Texaco Inc., USA
 SOURCE: U.S., 6 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3948953	A	19760406	US 1969-847729	19690805
US 3909460	A	19750930	US 1973-387426	19730810
PRIORITY APPLN. INFO.:		US 1969-847729	A2 19690805	

AB The reaction of glycerol [56-81-5] with C7-15 aliphatic ketones gave 2,2-
 dialkyl-4-hydroxymethyl-1,3-dioxolanes which were ethoxylated, sulfated (with
 1:1 molar Cl3O3H-Et2O [59263-80-8]), or phosphorylated with POCl3 to prepare
 surfactants with higher detergency than com. ethoxylated alcs. or sulfates of
 ethoxylated alcs. Thus, a mixture of glycerol 137, p-MeC6H4SO3H 5, benzene
 500, and C10-15 aliphatic ketones 260 parts was heated 65 hr to prepare a
 mixture of 2,2-dialkyl-4-hydroxymethyl-1,3-dioxolanes which were mixed with
 1% KOH and treated with ethylene oxide [75-21-8] (5.3 moles/mole dioxolanes) to
 prepare a surfactant.
 IT 59263-78-4 59263-79-5
 RL: USES (Uses)
 (detergents)
 L5 ANSWER 39 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 12 May 1984
 ACCESSION NUMBER: 1975:607840 HCAPLUS Full-text
 DOCUMENT NUMBER: 83:207840
 TITLE: Detergent compositions containing dioxolanes as
 surfactants
 INVENTOR(S): McCoy, David R.
 PATENT ASSIGNEE(S): Texaco Inc., USA
 SOURCE: U.S., 6 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3909460	A	19750930	US 1973-387426	19730810
US 3948953	A	19760406	US 1969-847729	19690805
PRIORITY APPLN. INFO.:		US 1969-847729	A2 19690805	

 AB 2-Methyl-4-methylol-2-nonyl-1,3-dioxolane [6542-98-9] and similar 2,2-dialkyl
 4-methylol-1,3-dioxolanes, prepared from glycerol [56-81-5] and C13-15 dialkyl
 ketones, were ethoxylated or sulfated to prepare surfactants with good
 solubility in water, good detergency in laundering, and light color. Thus,
 glycerol was condensed with C10-15 dialkyl ketones in benzene containing p-
 MeC6H4SO3H to prepare 2,2-dialkyl-4-methylol-1,3-dioxolanes which reacted
 with 5.2 moles ethylene oxide [75-21-8] to prepare a surfactant.
 IT 57413-41-9
 RL: USES (Uses)
 (detergents)
 L5 ANSWER 40 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 12 May 1984
 ACCESSION NUMBER: 1972:564761 HCAPLUS Full-text
 DOCUMENT NUMBER: 77:164761
 TITLE: o-(4-Phenyl-1-piperazinyl)alkane-1,2-diols
 INVENTOR(S): Hardie, Waldo Richard; Tankersley, Donald L.
 PATENT ASSIGNEE(S): Cutter Laboratories Inc.
 SOURCE: Ger. Offen., 16 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3948953	A	19760406	US 1969-847729	19690805
US 3909460	A	19750930	US 1973-387426	19730810
PRIORITY APPLN. INFO.:		US 1969-847729	A2 19690805	

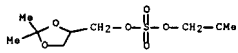
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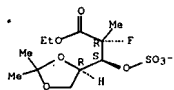
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DE 2210752 A 19720921 DE 1972-2210752 19720306
 US 3770743 A 19731106 US 1971-122144 19710308
 FR 2128713 A5 19721020 FR 1972-7923 19720307
 FR 2128713 B1 19750801 19750801
 GB 1336547 A 19731107 GB 1972-10550 19720307
 CA 1003837 A1 19770118 CA 1972-136438 19720307
 PRIORITY APPLN. INFO.: US 1971-122144 A 19710308
 GI For diagram(s), see printed CA Issue.
 AB The title compounds [I, n = 3 (II), 4, 5] and (or) their salts with HCl or
 citric acid; useful as analgesics, spasmolytics, blood pressure lowering, and
 alpha adrenergic blocking drugs, were prepared by hydrolysis of the di-
 oxolanes (III, R = Me, Et; R1 = Me, Ph). Thus, HOCH2CH(OH)(CH2)3OH was
 refluxed with Me2CO to give 3-(2,2-di-methyl-1,3-dioxolan-4-yl)propanol, which
 was esterified with MeSO2Cl to give 3-(2,2-dimethyl-1,3-dioxolan-4-yl)propyl
 methanesulfonate. This was heated with 1-phenylpiperazine to give III (R =
 R1 = Me), which was refluxed with concentrated HCl in EtOH to give II.2HCl.
 IT 37939-45-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 L5 ANSWER 41 OF 41 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ED Entered STN: 12 May 1984
 ACCESSION NUMBER: 1972:551582 HCAPLUS Full-text
 DOCUMENT NUMBER: 77:151582
 TITLE: Synthesis of (+)-trimethylsequirin C alternative
 acid-catalyzed cyclization pathways for
 (+)-trimethylsequirin C relatives
 AUTHOR(S): Davies, R. V.; Whitting, D. A.
 CORPORATE SOURCE: Dep. Chem., Univ. Nottingham, Nottingham, UK
 SOURCE: Tetrahedron Letters (1972), (36), 3849-52
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB Trimethylsequirin C (I) was prepared by condensation of the dioxolane (II)
 with p-MeOC6H4C.tplbond.CH to give the acetylenic alc., which was reduced by
 LiAlH4 to the olefin (III; R = OH). Further reduction of III (R = OSO3H) gave
 III (R = H), which was hydrolyzed to I.
 IT 38340-02-2 38340-22-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reduction of)
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 L6 72 SEA FILE=REGISTRY ABB=ON PLU=ON (308818-13-5/BI OR
 186189-03-7/BI OR 186189-06-0/BI OR 186189-04-8/BI OR
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223537-63-1/BI OR 251453-53-9/BI OR 251453-54-0/BI OR
 261963-60-4/BI OR 308818-15-7/BI OR 308818-17-9/BI OR
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 512203-82-6/BI OR 512203-84-8/BI OR 512203-86-0/BI OR
 512203-89-3/BI OR 512204-29-4/BI OR 57413-41-9/BI OR
 59263-78-4/BI OR 59263-79-5/BI OR 84833-76-1/BI OR
 84834-19-5/BI OR 84846-66-2/BI OR 879551-03-8/BI OR
 879551-05-0/BI OR 911829-50-0/BI OR 911829-56-6/BI OR
 911829-67-9/BI OR 911829-70-4/BI)
 => d 1,5,7,8,14,17,18,24,25,33,36,37,41,44,50,53-55,59,62-67,69,70,72 ide can
 L6 ANSWER 1 OF 72 REGISTRY COPYRIGHT 2006 ACS ON STN
 RN 911829-70-4 REGISTRY
 ED Entered STN: 01 Nov 2006
 CN INDEX NAME NOT YET ASSIGNED
 MF C11 H22 O6 S
 SR CA
 LC STN Files: CA, CAPLUS

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 1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 REFERENCE 1: 145:418420
 L6 ANSWER 5 OF 72 REGISTRY COPYRIGHT 2006 ACS ON STN
 RN 879551-05-0 REGISTRY
 ED Entered STN: 07 Apr 2006
 CN D-threo-Pentonic acid, 2-deoxy-2-fluoro-2-methyl-4,5-O-(1-
 methylthiethylidene)-, ethyl ester, hydrogen sulfate, ion(1-), (2R)-,
 N,N,N-triethylethanaminium (9CI) (CA INDEX NAME)
 F3 STEREOSEARCH
 MF C11 H18 F O8 S . C8 H20 N
 SR CA
 LC STN Files: CA, CAPLUS, USFATFULL
 CM 1
 CMN 879551-02-7
 CMF C11 H18 F O8 S
 Absolute stereochemistry.

31

32



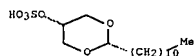
CM 2

CRN 66-40-0
CMF C8 H20 N1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:312289

L6 ANSWER 7 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 512204-29-4 REGISTRY
ED Entered STN: 08 May 2003
CN 1,3-Dioxan-5-ol, 2-undecyl-, hydrogen sulfate, cesium salt, cis- (9CI)
(CA INDEX NAME)
FS STEREOSEARCH
MF C15 H30 O6 S . Cs
SR CA
LC STN Files: CA, CAPLUS
CRN (714193-05-2)

Relative stereochemistry.



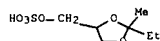
● Cs

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:323055

L6 ANSWER 8 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 512203-89-3 REGISTRY
ED Entered STN: 08 May 2003
33

CRN (752191-80-3)

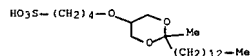


● Na

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:29655

L6 ANSWER 18 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 308818-17-9 REGISTRY
ED Entered STN: 15 Dec 2000
CN 1-Butanesulfonic acid, 4-[(2-methyl-2-tridecyl-1,3-dioxan-5-yl)oxy]-,
sodium salt (9CI) (CA INDEX NAME)
MF C22 H44 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS
CRN (791771-46-5)



● Na

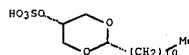
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:2339

L6 ANSWER 24 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 261963-60-4 REGISTRY
ED Entered STN: 17 Apr 2000
CN 1,3-Dioxolane-4-methanol, 2-methyl-2-undecyl-, hydrogen sulfate,
sodium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN (2-Methyl-2-undecyl-1,3-dioxolan-4-yl)methyl sulfate sodium salt
MF C16 H32 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS
CRN (686261-33-6)

CN 1,3-Dioxan-5-ol, 2-undecyl-, hydrogen sulfate, lithium salt, cis-
(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C15 H30 O6 S . Li
SR CA
LC STN Files: CA, CAPLUS
CRN (714193-05-2)

Relative stereochemistry.

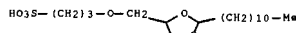


● Li

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:323055

L6 ANSWER 14 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 333952-55-9 REGISTRY
ED Entered STN: 02 May 2001
CN 1-Propanesulfonic acid, 3-[(2-undecyl-1,3-dioxolan-4-yl)methoxy]-,
sodium salt (9CI) (CA INDEX NAME)
MF C18 H36 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS
CRN (779315-35-4)



● Na

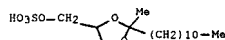
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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:202175

REFERENCE 2: 134:297503

L6 ANSWER 17 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 311820-48-1 REGISTRY
ED Entered STN: 28 Dec 2000
CN 1,3-Dioxolane-4-methanol, 2-ethyl-2-methyl-, hydrogen sulfate, sodium
salt (9CI) (CA INDEX NAME)
MF C7 H14 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS, CASREACT

34



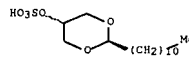
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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 132:238708

L6 ANSWER 25 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 259738-97-1 REGISTRY
ED Entered STN: 22 Mar 2000
CN 1,3-Dioxan-5-ol, 2-undecyl-, hydrogen sulfate, ammonium salt, trans-
(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C15 H30 O6 S . H3 N
SR CA
LC STN Files: CA, CAPLUS
CRN (742046-88-4)

Relative stereochemistry.



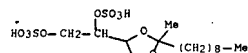
● NH3

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:336886

REFERENCE 2: 132:196127

L6 ANSWER 33 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 251453-54-0 REGISTRY
ED Entered STN: 21 Dec 1999
CN 1,2-Ethanediol, 1-(2-methyl-2-nonyl-1,3-dioxolan-4-yl)-, bis(hydrogen
sulfate), disodium salt (9CI) (CA INDEX NAME)
MF C15 H30 O10 S2 . 2 Na
SR CA
LC STN Files: CA, CAPLUS
CRN (781601-10-3)

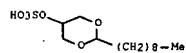


● 2 Na

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 132:13333

L6 ANSWER 36 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 223537-63-1 REGISTRY
ED Entered STN: 21 May 1999
CN 1,3-Dioxan-5-ol, 2-nonyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)
MF C13 H26 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS
CRN (744184-99-4)



● Na

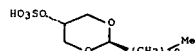
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 130:311801

L6 ANSWER 37 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 197294-70-5 REGISTRY
ED Entered STN: 14 Nov 1997
CN 1-Propanesulfonic acid, 3-[(2-undecyl-1,3-dioxan-5-yl)oxy]-, sodium salt, trans- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H36 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS
CRN (751462-50-7)

Relative stereochemistry.

37



● Na

6 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:249430

REFERENCE 2: 133:336886

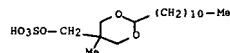
REFERENCE 3: 132:196127

REFERENCE 4: 131:134992

REFERENCE 5: 130:311801

REFERENCE 6: 126:145606

L6 ANSWER 50 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 143482-02-4 REGISTRY
ED Entered STN: 16 Sep 1992
CN 1,3-Dioxane-5-methanol, 5-methyl-2-undecyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)
MF C17 H34 O6 S . Na
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)
CRN (748740-13-8)



● Na

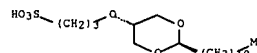
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 123:59616

REFERENCE 2: 117:133335

L6 ANSWER 53 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 143481-99-6 REGISTRY
ED Entered STN: 16 Sep 1992
CN 1,3-Dioxane-5-methanol, 5-methyl-2-pentyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)
MF C11 H22 O6 S . Na

39



● Na

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 127:308641

L6 ANSWER 41 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 186302-99-8 REGISTRY
ED Entered STN: 20 Feb 1997
CN 1,3-Dioxolan-4-ol, 2-dodecyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Dodecyl-1,3-dioxolan-5-yl sulfate sodium salt
MF C15 H30 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS
CRN (784119-41-1)



● Na

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

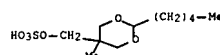
REFERENCE 1: 126:119361

L6 ANSWER 44 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 186189-06-0 REGISTRY
ED Entered STN: 18 Feb 1997
CN 1,3-Dioxan-5-ol, 2-undecyl-, hydrogen sulfate, sodium salt, trans- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Sodium trans-2-undecyl-1,3-dioxan-5-yl sulfate
FS STEREOSEARCH
MF C15 H30 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS, DETHERM*
(*File contains numerically searchable property data)
CRN (742046-88-4)

Relative stereochemistry.

38

SR CA
LC STN Files: CA, CAPLUS
CRN (724697-29-4)

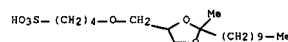


● Na

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 117:133335

L6 ANSWER 54 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 141186-39-2 REGISTRY
ED Entered STN: 08 May 1992
CN 1-Butanesulfonic acid, 4-[(2-decyl-2-methyl-1,3-dioxolan-4-yl)methoxy]-, sodium salt (9CI) (CA INDEX NAME)
MF C19 H38 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS
CRN (739339-61-0)



● Na

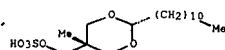
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 116:215135

L6 ANSWER 55 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 139888-72-5 REGISTRY
ED Entered STN: 27 Mar 1992
CN 1,3-Dioxane-5-methanol, 5-methyl-2-undecyl-, hydrogen sulfate, sodium salt, cis- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C17 H34 O6 S . Na
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMINFORMX
(*File contains numerically searchable property data)
CRN (746574-81-2)

Relative stereochemistry.

40



● Na

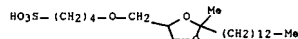
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:249430

REFERENCE 2: 128:63186

REFERENCE 3: 116:151685

L6 ANSWER 59 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 138487-18-0 REGISTRY
ED Entered STN: 24 Jan 1992
CN 1-Butanesulfonic acid, 4-[(2-methyl-2-tridecyl-1,3-dioxolan-4-yl)methoxy]-, sodium salt (9CI) (CA INDEX NAME)
MF C22 H44 O6 S . Na
SR CA
LC STN Files: CA, CAPLUS
CRN (779294-25-6)



● Na

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:2339

REFERENCE 2: 120:194530

REFERENCE 3: 116:62074

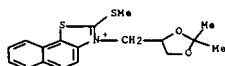
L6 ANSWER 62 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 127244-79-5 REGISTRY
ED Entered STN: 18 May 1990
CN D-manno-2-Octulosonic acid, 3-deoxy-4,5:7,8-bis-O-(1-methylethylidene)-, ethyl ester, cyclic 2-(1,3-propanediyl dithioacetal), hydrogen sulfate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN D-manno-2-Octulosonic acid, 3-deoxy-4,5:7,8-bis-O-(1-methylethylidene)-, ethyl ester, cyclic 2-(1,3-propanediyl mercaptol), hydrogen sulfate
FS STEREOSEARCH
MF C19 H32 O10 S3
SR CA

41

d]thiazolium (9CI)
MF C18 H20 N O2 S2 . C6 H11 O6 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER
(*File contains numerically searchable property data)

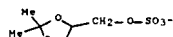
CM 1

CRN 84846-65-1
CMF C18 H20 N O2 S2



CM 2

CRN 84834-18-4
CMF C6 H11 O6 S



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 98:107200

L6 ANSWER 65 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 84834-19-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN Naphtho[2,1-d]thiazolium, 3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methyl]-2-methyl-, (2,2-dimethyl-1,3-dioxolan-4-yl)methyl sulfate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,3-Dioxolane-4-methanol, 2,2-dimethyl-, hydrogen sulfate, ion(1-), 3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methyl]-2-methylnaphtho[2,1-d]thiazolium (9CI)
MF C18 H20 N O2 S . C6 H11 O6 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER
(*File contains numerically searchable property data)

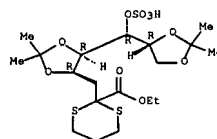
CM 1

CRN 84834-18-4
CMF C6 H11 O6 S

43

LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.

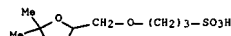


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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 112:235732

L6 ANSWER 63 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 119296-62-7 REGISTRY
ED Entered STN: 24 Feb 1989
CN 1-Propanesulfonic acid, 3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]-, sodium salt (9CI) (CA INDEX NAME)
MF C9 H18 O6 S . Na
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)
CRN (720658-06-0)



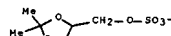
● Na

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 110:156549

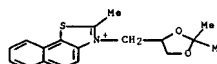
L6 ANSWER 64 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 84846-66-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Naphtho[2,1-d]thiazolium, 3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methyl]-2-(methylthio)-, (2,2-dimethyl-1,3-dioxolan-4-yl)methyl sulfate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,3-Dioxolane-4-methanol, 2,2-dimethyl-, hydrogen sulfate, ion(1-), 3-[(2,2-dimethyl-1,3-dioxolan-4-yl)methyl]-2-(methylthio)naphtho[2,1-

42



CM 2

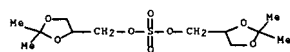
CRN 84834-17-3
CMF C18 H20 N O2 S



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 98:107200

L6 ANSWER 66 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 84833-76-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,3-Dioxolane-4-methanol, 2,2-dimethyl-, sulfate (2:1) (9CI) (CA INDEX NAME)
MF C12 H22 O8 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

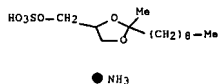
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 98:107200

L6 ANSWER 67 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
RN 59263-79-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,3-Dioxolane-4-methanol, 2-methyl-2-nonyl-, hydrogen sulfate, ammonium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Ammonium 2-methyl-2-nonyl-1,3-dioxolane-4-ylmethyl sulfate
MF C14 H28 O6 S . H3 N

44

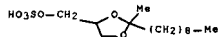
LC STN Files: CA, CAPLUS, USPATFULL
 CR: (57413-41-9)



1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 85:7606

L6 ANSWER 69 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 57413-41-9 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN 1,3-Dioxolane-4-methanol, 2-methyl-2-nonyl-, hydrogen sulfate (9CI)
 (CA INDEX NAME)
 OTHER NAMES:
 CN Hydrogen 2-methyl-2-nonyl-1,3-dioxolan-4-ylmethyl sulfate
 MF C14 H28 O6 S
 CI COM
 LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 83:207840

L6 ANSWER 70 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 38340-22-6 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN 1,3-Dioxolane-4-methanol, α-(3,4-dimethoxyphenyl)-α-(2-(4-methoxyphenyl)ethenyl)-2,2-dimethyl-, hydrogen sulfate, (R*,S*-(E))-
 (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C23 H28 O9 S
 LC STN Files: CA, CAPLUS

Relative stereochemistry.
 Double bond geometry as shown.

45

display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REGISTRY for direct browsing and searching of
 all substance data from the REGISTRY file. Enter HELP FIRST for
 more information.

L7 0 L6

FILE 'USPATFULL' ENTERED AT 12:13:33 ON 04 DEC 2006
 CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 30 Nov 2006 (20061130/PD)
 FILE LAST UPDATED: 30 Nov 2006 (20061130/ED)
 HIGHEST GRANTED PATENT NUMBER: US7143445
 HIGHEST APPLICATION PUBLICATION NUMBER: US2006272066
 CA INDEXING IS CURRENT THROUGH 28 Nov 2006 (20061128/UPCA)
 ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 30 Nov 2006 (20061130/PD)
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

L8 5 L6

L8 ANSWER 1 OF 5 USPATFULL on STN
 ACCESSION NUMBER: 2006:144628 USPATFULL Full-text
 TITLE: Preparation of 2'-fluoro-2'-alkyl-substituted or
 other optionally substituted ribofuranosyl
 pyrimidines and purines and their derivatives
 Chun, Byoung-Kwon, Robbinsville, NJ, UNITED STATES
 Wang, Peiyuan, Glen Rock, NJ, UNITED STATES
 Du, Jinfu, New Hope, PA, UNITED STATES
 Rachakonda, Suguan, Robbinsville, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006122146	A1	20060608
APPLICATION INFO.:	US 2005-225425	A1	20050913 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-609783P	20040914 (60)
	US 2004-610035P	20040915 (60)
	US 2005-666230P	20050329 (60)

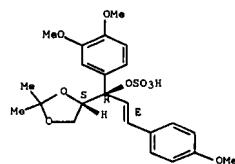
DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS,
 MN, 55402-0903, US

NUMBER OF CLAIMS: 83
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1933

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides (i) processes for preparing a 2'-deoxy-2'-
 fluoro-2'-methyl-D-ribofuranosyl nucleosides, (ii) conversion of
 intermediate lactones to nucleosides with potent anti-HCV activity, and
 their analogues, and (iii) methods to prepare the anti-HCV nucleosides
 containing the 2'-deoxy-2'-fluoro-2'-C-methyl-β-D-ribofuranosyl nucleosides
 from a preformed, preferably naturally-occurring, nucleoside.

47

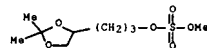


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 77:151582

L6 ANSWER 72 OF 72 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 37939-45-0 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Sulfuric acid, 3-(2,2-dimethyl-1,3-dioxolan-4-yl)propyl methyl ester
 (9CI) (CA INDEX NAME)
 MF C9 H18 O6 S
 LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 77:164761

FILE 'CAOLD' ENTERED AT 12:13:23 ON 04 DEC 2006
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FILE COVERS 1907-1966
 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate
 substance identification. Title keywords, authors, patent
 assignees, and patent information, e.g., patent numbers, are
 now searchable from 1907-1966. TIFF images of CA abstracts
 printed between 1907-1966 are available in the PAGE

46

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 5 USPATFULL on STN
 ACCESSION NUMBER: 2006:111056 USPATFULL Full-text
 TITLE: Destructible surfactants and uses thereof
 Mallet, Claude R, Attleboro, MA, UNITED STATES
 Russell, Reb J, Manlius, NY, UNITED STATES
 Yardley, Kurt, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006094000	A1	20060504
APPLICATION INFO.:	US 2003-516419	A1	20030530 (10)
	WO 2003-US16819		20030530
			20050829 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-385018P	20020531 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	EDWARDS & ANGELL, LLP, P.O. BOX 55874, BOSTON, MA, 02205, US	

NUMBER OF CLAIMS: 51
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 10 Drawing Page(s)
 LINE COUNT: 1072

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Destructible surfactants and methods of using same are provided. The
 invention includes anionic surfactants having a dioxolane or dioxane
 functional group that enable degradation of the surfactant under acidic
 conditions. The invention also includes methods of using anionic surfactants
 in a variety of applications relating to samples containing small molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 5 USPATFULL on STN
 ACCESSION NUMBER: 2006:67440 USPATFULL Full-text
 TITLE: Destructible surfactants and uses thereof
 Bouvier, Edouard S.P, Stow, MA, UNITED STATES
 Compton, Bruce J, Lexington, MA, UNITED STATES
 Gebler, John C, Hopkinton, MA, UNITED STATES
 Gilar, Martin, Franklin, MA, UNITED STATES
 Yu, Ying-Qing, Milford, MA, UNITED STATES
 Lee, Peter Jeng-Jong, Westborough, MA, UNITED STATES
 Brown, Elizabeth K, Sutton, MA, UNITED STATES
 PATENT ASSIGNEE(S): WATERS INVESTMENTS LIMITED, NEW CASTLE, GERMANY,
 FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006057659	A1	20060316
APPLICATION INFO.:	US 2003-516418	A1	20030530 (10)
	WO 2003-US16820		20030530
			20050513 PCT 371 date

	NUMBER	DATE

48

10/516418

PRIORITY INFORMATION: US 2002-385021P 20020531 (60)
 DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: EDWARDS & ANGELL, LLP, P.O. BOX 55874, BOSTON, MA, 02205, US
 NUMBER OF CLAIMS: 70
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 13 Drawing Page(s)
 LINE COUNT: 1376

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods for enhancing chemical reactions of molecules, e.g., biomolecules, with destructible surfactants. The chemical reactions may involve and/or be associated with analysis, e.g., solubilizing, separating, purifying and/or characterizing the molecules. In one aspect, the anionic surfactants of the present invention may be selectively broken up at relatively low pH. The resulting breakdown products of the surfactants may be removed from the molecule/sample with relative ease. The invention has applicability in a variety of analytical techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 4 OF 5 USPATFULL ON STN

ACCESSION NUMBER: 76:18764 USPATFULL Full-text
 TITLE: Dioxolane derivatives having surfactant properties
 INVENTOR(S): McCoy, David R., Wappingers Falls, NY, United States
 PATENT ASSIGNEE(S): Texaco Inc., New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 3948953		19760406
APPLICATION INFO.:	US 1969-847729		19690805 (4)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Gallagher, Richard J.		
ASSISTANT EXAMINER:	Turnipseed, James H.		
LEGAL REPRESENTATIVE:	Whaley, T. H., Ries, C. G.		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
LINE COUNT:	432		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention concerns water soluble surfactants prepared by introducing solubilizing groups such as sulfates and polyoxyalkylenes into the dioxolane condensates of aliphatic ketones with glycerol.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

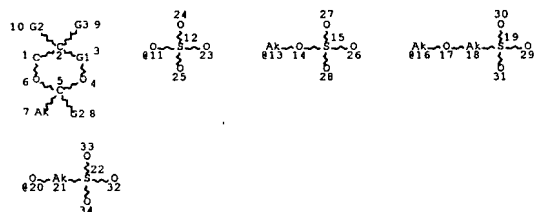
L8 ANSWER 5 OF 5 USPATFULL ON STN

ACCESSION NUMBER: 75:51257 USPATFULL Full-text
 TITLE: Detergent compositions containing dioxolanes as surfactants and their preparation
 INVENTOR(S): McCoy, David Ross, Wappingers Falls, NY, United States
 PATENT ASSIGNEE(S): Texaco Inc., New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 3948953		19760406
APPLICATION INFO.:	US 1969-847729		19690805 (4)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Gallagher, Richard J.		
ASSISTANT EXAMINER:	Turnipseed, James H.		
LEGAL REPRESENTATIVE:	Whaley, T. H., Ries, C. G.		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
LINE COUNT:	432		

49

10/516418



REP G1=(0-2) CH2
 VAR G2=H/CH3
 VAR G3=11/13/16/20
 NODE ATTRIBUTES:
 CONNECT IS X2 RC AT 1
 DEFAULT MLEVEL IS ATOM
 MLEVEL IS CLASS AT 7 13 16 18 21
 GGCAT IS LOC AT 13
 GGCAT IS LOC AT 16
 GGCAT IS LOC AT 18
 GGCAT IS LOC AT 21
 DEFAULT ECLLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
 ECLLEVEL IS LIM ON ALL NODES
 ALL RING(S) ARE ISOLATED

L12 55 SEA FILE=MARPAT SSS PUL L10 (MODIFIED ATTRIBUTES)
 L13 54 SEA FILE=MARPAT ABB=ON PUL=ON L12/COMPLETE

L13 ANSWER 1 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 144:312289 MARPAT Full-text
 TITLE: Preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides as potential antiviral agents
 INVENTOR(S): Chun, Byoung-Kwon; Wang, Peiyuan
 PATENT ASSIGNEE(S): Pharmasset, Inc., USA
 SOURCE: PCT Int. Appl., 74 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

51

10/516418

PATENT INFORMATION: US 3909460 19750930
 APPLICATION INFO.: US 1973-387426 19730810 (5)
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1969-847729, filed on 5 Aug 1969, now abandoned
 DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Padgett, Benjamin R.
 ASSISTANT EXAMINER: Parr, E. Suzanne
 LEGAL REPRESENTATIVE: Whaley, T. H., Ries, C. G., Marlowe, Bernard
 NUMBER OF CLAIMS: 14
 EXEMPLARY CLAIM: 1
 LINE COUNT: 498

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention concerns water soluble surfactants prepared by introducing solubilizing groups such as sulfates and polyoxyalkylenes into the dioxolane condensates of alkyl ketones with glycerol. These surfactants are particularly useful in detergent compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

FILE 'MEDLINE' ENTERED AT 12:13:42 ON 04 DEC 2006

FILE 'BIOSIS' ENTERED AT 12:13:42 ON 04 DEC 2006

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FILE 'EMBASE' ENTERED AT 12:13:42 ON 04 DEC 2006

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L9 O L6

FILE 'MARPAT' ENTERED AT 12:13:47 ON 04 DEC 2006

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FILE CONTENT: 1961-PRESENT VOL 145 ISS 22 (20061201/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
 (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 20060234956 19 OCT 2006
 DE 102005016345 12 OCT 2006
 EP 1710237 11 OCT 2006
 JP 2006282618 19 OCT 2006
 WO 2006108879 19 OCT 2006
 GB 2424583 04 OCT 2006
 FR 2884252 13 OCT 2006
 RU 2284857 10 OCT 2006
 CA 2500558 10 SEP 2006

Expanded G-group definition display now available.

L10 STR

50

10/516418

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006031725	A2	20060323	WO 2005-US32406	20050913
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, CA, GW, GQ, GM, KE, MG, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, NA, SD, SL, SE, TS, UG, ZM, ZW, AM, AZ, BY, KG, KE, MD, RU, TJ, TM				
US 2006122146	A1	20060608	US 2005-225425	20050913
PRIORITY APPLN. INFO.:			US 2004-609783P	20040914
			US 2004-610035P	20040915
			US 2005-666230P	20050329

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for preparing of 2-deoxy-2-fluoro-2-methyl-D-ribofuranosyl, I, wherein R1 and R2 can independently be H, CH3, acetyl, benzoyl, pivaloyl, 4-nitrobenzoyl, 3-nitrobenzoyl, 2-nitrobenzoyl, 4-chlorobenzoyl, 3-chlorobenzoyl, 2-chlorobenzoyl, 4-methylbenzoyl, 3-methylbenzoyl, 2-methylbenzoyl, 4-phenylbenzoyl, benzyl, 4-methoxybenzyl, trityl, trialkylsilyl, t-butyl-dialkylsilyl, t-butyl-diphenylsilyl, TIPDS, THP, MOM, or MEM are prepared and used in the condensation to 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs. Thus, 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs II and III, wherein X is a halogen; Y is N or CH; Z is a halogen, hydroxyl, ether, thiol, thioether, (un)substituted amine or alkyl; R1' is alkyl, vinyl, ethynyl; R2' and R3' can be same or different H, alkyl, arylalkyl, acyl, cyclic acetal such as 2',3'-O-isopropylidene or 2',3'-O-benzylidene, or 2',3'-cyclic carbonate; R4, R5, and R6 are independently H, halogen, hydroxyl, ether, thiol, thioether, R3, (un)substituted amine, (un)substituted amide, alkyl, halogenated alkyl, alkenyl, halogenated alkenyl, alkynyl, halogenated alkynyl, hydroxy alkyl, alkoxy are prepared and are potential anti-HCV agents. Specifically, IV was prepared in 88 % yield via condensation, alkylation and stereoselective fluorination reactions and can exhibit potential use as an anti-HCV agent.

L13 ANSWER 2 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 144:129239 MARPAT Full-text
 TITLE: Preparation of novel C6-substituted furanoid sugar amino acids
 INVENTOR(S): Chakraborty, Tushar Kanti; Sudhakar, Gangarajula
 PATENT ASSIGNEE(S): India
 SOURCE: U.S. Pat. Appl. Publ., 22 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

52

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2006014939 A1 20060119 US 2004-892542 20040715

WO 2006011000 A1 20060202 WO 2004-183679 20041109

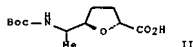
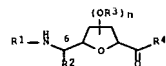
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

PRIORITY APPL. INFO.: US 2004-892542 20040715

OTHER SOURCE(S): CASREACT 144:129239

GI



AB The invention relates to furanoid sugar amino acids I (R1 = H, tert-butoxycarbonyl (Boc), benzyloxycarbonyl, 9-fluorenylmethyl, Ac; R2 = alkyl, PhCH2 and all other amino acid side chains; or R1-R2 = (CH2)2-4; R3 = H, tert-Bu, alkyl, benzyl, arylmethyl, alkanoyl, arylalkenyl, SO3H, PO3H2, silyl; R4 = alkoxy, amino groups; n = 2, 3, 4) and their salts which carry an addnl. chiral center at the C6-position with substituents resembling the side chains of natural amino acids. More particularly, these are 6-substituted 6-deoxy-6-amino-2,5-anhydroaldonic acids and their 3,4-dideoxy congeners, in enantiomerically pure form, which constitute an important class of conformationally-constrained peptide building blocks that can be used as dipeptide isosteres in peptidomimetic studies. Thus, II was prepared by a multistep sequence starting with condensation of N,N-dibenzyl-L-alanine with 3,4-O-isopropylidene-1,1-dibromobut-1-ene-3,4-diol.

L13 ANSWER 3 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 143:347451 MARPAT Full-text

TITLE: Synthesis of chiral furan amino acids as novel peptide building blocks

INVENTOR(S): Chakraborty, Tushar Kanti; Tapadar, Subhasish

PATENT ASSIGNEE(S): India

SOURCE: U.S. Pat. Appl. Publ., 20 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

53

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DS, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

BR 2004008420 A 20060321 20040308

CN 1771237 A 20060510 20040308

JP 2006522033 T2 20060928 20040308

EP 1720844 A2 20061115 20040308

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AU 2004226280 A1 20041014 20040309

AU 2004226281 A1 20041014 20040309

CA 2520893 AA 20041014 20040309

CA 2520894 AA 20041014 20040309

WO 2004087695 A1 20041014 20040309

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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

WO 2004087696 A1 20041014 20040309

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EP 1608645 A1 20051228 20040309

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EP 1608646 A1 20051228 20040309

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

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BR 2004008888 A 20060411 20040309

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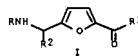
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PRIORITY APPL. INFO.: US 2004-814525 20040331

OTHER SOURCE(S): CASREACT 143:347451

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AB The invention provides chiral furan amino acids I (R = H, including HCl and CF3CO2H salts, Ac, Boc, Cbz, Fmoc; R1 = OH, alkoxy, an amino group, etc.; R2 = amino acid side chain), an important class of conformationally-constrained peptide-based mols. that can be used as dipeptide isosteres in peptidomimetic studies. I were prepared from N-terminal-protected amino aldehydes derived from the corresponding N-terminal-protected protected L- or D-amino acids. Thus, (S)-I (R = Boc, R1 = OH, R2 = Me) was prepared by a multistep sequence starting with condensation of Boc-L-alanine with 3,4-O-isopropylidene-1,1-dibromo-1-butene-3,4-diol.

L13 ANSWER 4 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 141:332202 MARPAT Full-text

TITLE: Preparation of azolidinecarboxamides as antithrombotics and anticancer drugs.

INVENTOR(S): Tsaklakidis, Christos; Dorsch, Dieter; Mederski, Werner; Cezanne, Bertram; Gleitz, Johannes

PATENT ASSIGNEE(S): Merck Patent GmbH, Germany

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PATENT NO. KIND DATE APPLICATION NO. DATE

DE 10315377 A1 20041014 DE 2003-10315377 20030403

AU 2004226278 A1 20041014 AU 2004-226278 20040308

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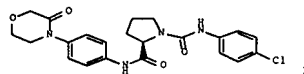
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WO 2004-EP2405 20040309

WO 2004-EP2407 20040309

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AB R1R2(TYX)EWCOGD [R1, R2 = H, O, halo, A, ethynyl, OR3, NO2, cyano, N3, CO2R3, CON(R3)2, NR3COA, NR3SO2A, etc.; R1R2 = toms to form a bicyclic or spirocyclic (heterocyclic) ring; R3 = H, A, etc.; R4 = H, A; W = N, CR3, C; E = atoms to form a 3-7 membered (double bond containing) (heterocyclic) ring with W, G = [C(R4)2]n, [C(R4)2]nR3, [C(R4)2]nO, [C(R4)2]nS, [C(R4)2]nN, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, 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[C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, 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[C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]nP, [C(R4)2]nQ, [C(R4)2]nR, [C(R4)2]nS, [C(R4)2]nT, [C(R4)2]nU, [C(R4)2]nV, [C(R4)2]nW, [C(R4)2]nX, [C(R4)2]nY, [C(R4)2]nZ, [C(R4)2]nA, [C(R4)2]nB, [C(R4)2]nC, [C(R4)2]nD, [C(R4)2]nE, [C(R4)2]nF, [C(R4)2]nG, [C(R4)2]nH, [C(R4)2]nI, [C(R4)2]nJ, [C(R4)2]nK, [C(R4)2]nL, [C(R4)2]nM, [C(R4)2]nN, [C(R4)2]nO, [C(R4)2]

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10232780 A1 20040212 DE 2002-10232780 20020718
CA 2492912 AA 20040129 CA 2003-2492912 20030717
AU 2003250979 A1 20040209 AU 2003-250979 20030717
EP 1525192 A2 20050427 EP 2003-765017 20030717

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003012776 A 20050503 BR 2003-12776 20030717
CN 1675187 A 20050928 CN 2003-819658 20030717
JP 2006501198 T2 20060112 JP 2004-522481 20030717
US 2005256313 A1 20051117 US 2005-521360 20050114
DE 2002-10232780 20020718
WO 2003-EP7766 20030717

PRIORITY APPLN. INFO.:
AB Environmentally acceptable cyclic cosurfactants (structures specified), useful for household detergents and cleaners and in body cleaning and care products, were manufactured by condensation reaction of C3-6 aldehydes with multivalent alcs., amines, thiols or carboxylic acids in the presence of acid catalysts. For example, heating a mixture of 0.55 mol ethylhexanol, 0.25 mol (HOCH2)3CNH2 and 0.25 g Amberlyst 15 for 3 h at 100°/500 mbar with removal of H2O gave a solution of 3,5-bis(1-ethylpentyl)-7a-hydroxymethylidihydrooxazolo[3,4-c]oxazole (I) cosurfactant. A dishwashing detergent containing alkylbenzenesulfonate (Lutensil A-LBN; 50%) 30, ethoxylated (7 EO) C13-15 alcs. (Lutensol AO 7) 10, ethoxylated (3 EO) C12-14 alcs. (Lutensol A3N) 3 and I 3% had better foam stability than similar detergent containing lauramine oxide instead of I.

L13 ANSWER 6 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 140:17749 MARPAT Full-text
TITLE: Destructible surfactants and use in small molecule analysis
INVENTOR(S): Mallet, Claude; Russel, Reb J., II; Yardley, Kurt
PATENT ASSIGNEE(S): Waters Investments Limited, USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102536	A2	20031211	WO 2003-US16819	20030530
WO 2003102536	A3	20040902		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

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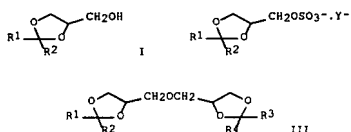
cis- and trans-2-undecyl-5-hydroxy-1,3-dioxane in 0.070 dm³ CC14 and 2 + 10-3 dm³ pyridine, stirring the mixture for 1 h at ambient temperature and 6-8 h at approx. 110°K gave 89% mol.% of a mixture of cis- and trans-2-undecyl-1,3-dioxane-5-sulfate pyridinium salts, m. 372-376°K and having Krafft point <293° (1% aqueous solution).

L13 ANSWER 8 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 134:29655 MARPAT Full-text
TITLE: Method for preparation of diglycerin from diglycerin ketal of acetal derivatives
INVENTOR(S): Murata, Daiya; Imanaka, Takehiro; Nagumo, Hiroshi
PATENT ASSIGNEE(S): Rao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKKXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000144705	A2	20001212	JP 1999-157970	19990604
			JP 1999-157970	19990604

PRIORITY APPLN. INFO.: CASREACT 134:29655

GI



AB Diglycerin, HOCH2CH(OH)OCH2CH(OH)CH2OH, is prepared by reaction of glycerin ketal or acetal (I; R1, R2 = H, hydrocarbyl; or R1 and R2 are linked to each other to form a carbo cyclic ring) glycerin ketal or acetal sulfate salt (II; R3, R4 = H, hydrocarbyl; or R3 and R4 are linked to each other to form a carbo cyclic ring; Y⁺ = salt-forming cation) to give diglycerin ketal or acetal (III; R1, R2, R3, R4 = H, hydrocarbyl; or R1 and R2 or R3 and R4 are linked to each other to form a carbo cyclic ring) followed by deacetalization or deketalization. This process gives diglycerin of high purity which is useful as food additive or an intermediate for nonionic surfactants. Thus, 116.9 g glycerin Me Et ketone ketal, 20 mL pyridine, and 500 mL CC14 were heated to 45° in a flask, followed by adding portionwise 127.3 g 80%-pyridine complex over a period of 3 h, and the resulting mixture was neutralized by adding 66.7 g 48% aqueous NaOH, 260 g H2O, and 900 g ethanol and evaporated to remove the solvent to give 219.9 g II (R3 = Et, R4 = Me, Y⁺ = Na⁺). The latter product and 116.9 g glycerin Me Et ketone ketal were added to a flask, followed by adding 66.7 g 48% aqueous NaOH and 650 mL xylene, and the resulting mixture

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

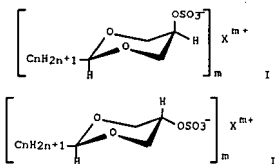
AU 2003234681 A1 20031219 AU 2003-234681 20030530
US 2006094000 A1 20060504 US 2005-516419 20050829
PRIORITY APPLN. INFO.: US 2002-385018P 20020531
US 2003-US16819 20030530

AB The anionic surfactants have a dioxolane or dioxane functional group that enable degradation of the surfactant under acidic conditions. Using the anionic surfactants in a variety of anal. applications relates to samples containing small mols.

L13 ANSWER 7 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 138:323055 MARPAT Full-text
TITLE: Manufacture of novel sulfate salts of cis- and trans-2-alkyl-5-hydroxy-1,3-dioxanes
INVENTOR(S): Piaszecki, Andrzej; Burczyk, Bogdan; Sokolowski, Adam; Kotlowska, Urszula
PATENT ASSIGNEE(S): Politechnika Wroclawska, Pol.
SOURCE: Pol., 6 pp.
CODEN: POXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 177120	B1	19990930	PL 1995-308929	19950602
			PL 1995-308929	19950602

PRIORITY APPLN. INFO.:
GI



AB Surface-active title salts (I and II; X = Li, K, Cs, Mg, Ca, Ba, ammonium, pyridinium; m = 1, 2, n = 7-13) were manufactured by reacting the parent cis- and/or trans-2-(C7-13-alkyl)-5-hydroxy-1,3-dioxanes with ClSO3H in CC14 in the presence of pyridine, or with 80%-pyridine complex, then removing the solvent and neutralizing the residue with aqueous alc. solution or suspension of alkali metal or alkaline earth metal hydroxide, carbonate or bicarbonate, or NH4OH. For example, adding 0.0464 mol of 80%-pyridine complex at ambient temperature in portions to a stirred solution of 0.0387 mol of a mixture of

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was refluxed for etherification with azeotropic removal of water for 16 h to give 97.9% (III; R1 = R3 = Et, R4 = Me). The latter compound (60 g) was treated with p-toluenesulfonic acid and 3-5% steam per h was introduced with removing excess steam and Me Et ketone under the system for 5 h and the resulting mixture was dehydrated at 90° and 6.66 kPa for 0.5 to give 41.0 g diglycerin (97.9% purity).

L13 ANSWER 9 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 134:2339 MARPAT Full-text
TITLE: Destructible surfactants and uses thereof
INVENTOR(S): Lee, Peter Jeng Jony; Compton, Bruce J.
PATENT ASSIGNEE(S): Waters Investments Ltd., USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000070334	A1	20001123	WO 2000-US13028	20000512

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 2000048435 A5 20001205 AU 2000-48435 20000512
EP 1181537 A1 20020227 EP 2000-930651 20000512

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: US 1999-134113P 19990514
WO 2000-US13028 20000512

AB Destructible surfactants and methods of using same are provided. The invention includes anionic surfactants having a dioxolane or dioxane functional group which enables the surfactant to be broken down under acidic conditions. The invention also includes methods of making anionic surfactants and methods of using anionic surfactants in a variety of applications.

REFERENCE COUNT: 3
THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 133:281687 MARPAT Full-text
TITLE: Preparation of 3,4-dihydroxybutanoic acid and 3-hydroxy-γ-butyrolactone
INVENTOR(S): Hollingsworth, Rawle I.
PATENT ASSIGNEE(S): Michigan State University, USA
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

60

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alignment film
INVENTOR(S): Mori, Yoshinasa; Terada, Tadashi; Takao, Hideaki;
Shimizu, Yasushi; Arai, Katsumi; Aseo, Yasushi;
Moriyama, Takashi; Toganoh, Takeshi
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.
CODEN: JXOKAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11160712	A2	19990618	JP 1998-264569	19980918
US 6139927	A	20001031	US 1998-154735	19980917
PRIORITY APPLN. INFO.:			JP 1997-253437	19970918

$$\left[\begin{array}{c} \text{O} \quad \text{O} \\ \parallel \quad \parallel \\ \text{---N} \quad \text{C} \quad \text{A} \quad \text{C} \quad \text{N---} \\ \parallel \quad \parallel \\ \text{O} \quad \text{O} \end{array} \right]_m \text{---} \text{C}_6\text{H}_4 \text{---} \left[\text{---} (\text{CH}_2)_x \text{---} (\text{B}) \text{---} (\text{CH}_2)_y \text{---} (\text{O}) \text{---} \text{C}_6\text{H}_4 \text{---} \right]_n$$

AB In the liquid crystal display device having a chiral smectic liquid crystal, wherein a alignment film is made from polyimide I A = straight chain 4-valent organic; B = -C(R1)(R2)-; R1-2 = H, alkyl; a, b = 0 or 1; c = 0 or 1; x, y ≥ 0 integer; n ≥ 2 integer). The liquid crystal display shows the excellent alignment control.

L13 ANSWER 13 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
ACCESSION NUMBER: 131:37821 MARPAT Full-text
TITLE: Liquid-crystal device with improved switching
property, display device, and its manufacture
INVENTOR(S): Hanau, Yukio; Koichichi, Shinjo, Kenji; Yamada,
Shuji; Mori, Yoshimasa; Nakamura, Shinichi;
Noguchi, Kouji
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
OPEN-IRJXAY

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LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 175563	B1	19990129	PL 1994-306516	19941223
PRIORITY APPLN. INFO.:			PL 1994-306516	19941223
GI				

AB The title compounds [I or II; $n = 7-13$], potentially useful as surfactants (no data), were prepared by reacting cis- (or trans-) 2-alkyl-5-hydroxy-1,3-dioxanes [III or IV] with ClSO_3H in CCl_4 in the presence of pyridine followed by treatment of the intermediate with alc.- H_2O solution of NaOH , Na_2CO_3 or NaHCO_3 or by reacting III or IV with $\text{C}_5\text{H}_5\text{N}^+\text{SO}_3^-$ in CCl_4 followed by treatment of the intermediate with alc.-aqueous solution of NaOH , Na_2CO_3 or NaHCO_3 .

L13 ANSWER 16 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 130:215998 MARPAT Full-text
 TITLE: Liquid-crystal element using thermosetting
 adhesive, its manufacture, and device using it
 INVENTOR(S): Hachisu, Takahiro; kodera, Yasuto; Munakata,
 Hirohide; Okada, Shinjiro
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 56 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052393	A2	19990226	JP 1997-216962	19970729
PRIORITY APPLM. INFO.			JP 1997-216962	19970729
<p>AB The liquid-crystal element is manufactured by applying thermosetting adhesive beads and an adsorbent for polar substances on a substrate and adhering the substrate with another substrate. The obtained liquid-crystal element and the device using the element are also claimed. Elec. asymmetry between substrates is prevented by using the adsorbent.</p>				

L13 ANSWER 17 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 130:215957 MARPAT Full-text

TITLE: Liquid-crystal device with reduced DC offset potential and liquid-crystal display apparatus
Sato, Kimikazu; Nakamura, Shinichi; Takashi, Etsuo; Hanyu, Yukio; Noguchi, Koji; Mori, Yoshimasa; Yamada, Shuji

INVENTOR(S): Canon K. K., Japan

PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 52 pp.

SOURCE: CODEN: JKKXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052433	A2	19990226	JP 1997-216955	19970729
PRIORITY APPLN. INFO.: JP 1997-216955 19970729				

AB The device has a pair of substrates sandwiching a liquid-crystal composition, in which charge amts. of ions in the composition after elec.-field application from a 1st substrate to a 2nd substrate has the different absolute value from that of the ions after elec.-field application from the 2nd substrate to the 1st substrate. The apparatus has the device and its driving apparatus. The substrates may be coated with electrodes containing a nonionic surfactant. The device shows reduced DC offset potential and stable threshold value.

L13 ANSWER 18 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 130:215956 MARPAT Full-text

TITLE: Orientation method of liquid crystal, manufacture of liquid-crystal device, and liquid-crystal display apparatus

INVENTOR(S): Nakamura, Shinichi; Hanyu, Yukio; Sato, Kimikazu; Takiguchi, Taka; Noguchi, Koji; Shimizu, Yasushi

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052385	A2	19990226	JP 1997-220244	19970731
JP 3096902	B2	20001010		
PRIORITY APPLN. INFO.: JP 1997-220244 19970731				

AB The device comprises a pair of electrode substrates sandwiching a chiral-smectic phase-containing liquid crystal. In the method, the crystal is subjected to at least one cycle of heat and cool treatment in a chiral-smectic-phase temperature range. A liquid-crystal display apparatus containing the device and its driving apparatus is also claimed. The device shows excellent orientation and large driving margin. The apparatus gives good images with excellent imaging property.

L13 ANSWER 19 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 130:215958 MARPAT Full-text

TITLE: Orientation method of liquid crystal, manufacture of liquid-crystal device, and liquid-crystal display apparatus

INVENTOR(S): Nakamura, Shinichi; Hanyu, Yukio; Sato, Kimikazu; Takiguchi, Taka; Noguchi, Koji; Shimizu, Yasushi

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052382	A2	19990226	JP 1997-216953	19970729
PRIORITY APPLN. INFO.: JP 1997-216953 19970729				

AB The device has a liquid-crystal composition sandwiched by a pair of substrates, in which one of the substrate has a 1st orientation-controlling film which is conducted uniaxial orientation treatment and the other substrate has a 2nd orientation-controlling film which is not conducted the treatment. In the device, the 1st film has neutral and/or ionic mols. on its surface. The device is manufactured by treating the 2nd substrate with the mols. and injecting a liquid crystal into the substrate. A liquid-crystal apparatus equipped with the device and its driving apparatus is also claimed. The device shows stable threshold value and improved electrooptical switching property. The device gives good images with high quality.

L13 ANSWER 22 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 130:203212 MARPAT Full-text

TITLE: Liquid crystal device containing hydrophilic layer and its manufacture

INVENTOR(S): Maruyama, Tomoko; Aoki, Kyoshi

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11043674	A2	19990216	JP 1997-216954	19970729
PRIORITY APPLN. INFO.: JP 1997-216954 19970729				

AB The device contains a liquid-crystal composition whose both sides are successively coated with water-containing hydrophilic layers containing H₂O and a substance (not H₂O) and electrodes. The manufacture method involves applying a substrate with the substance and moisturizing the substance. A liquid-crystal display device containing the device and its driving apparatus is also claimed. The device shows good switching property. The display device gives good images with high reliability and excellent reproductivity.

L13 ANSWER 23 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 130:203029 MARPAT Full-text

TITLE: Liquid crystal element containing optically active compound, its manufacture, and the liquid crystal device

INVENTOR(S): Maruyama, Tomoko; Tsuzuki, Hidekazu; Sato, Koichi

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

ACCESSION NUMBER: 130:215955 MARPAT Full-text

TITLE: Orientation method of liquid crystal, manufacture of liquid-crystal device, and liquid-crystal display apparatus

INVENTOR(S): Noguchi, Koji; Takiguchi, Taka; Sato, Koichi; Nakamura, Shinichi; Shimizu, Yasushi

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 40 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052384	A2	19990226	JP 1997-220237	19970731
JP 3062997	B2	20000712		
PRIORITY APPLN. INFO.: JP 1997-220237 19970731				

AB The device comprises a pair of electrode substrates sandwiching a chiral-smectic phase-containing liquid crystal. The method involves keeping the crystal for 210 h at controlled temperature in a chiral-smectic-phase temperature range. A liquid-crystal display apparatus containing the device and its driving apparatus is also claimed. The device shows excellent orientation and large driving margin. The apparatus gives good images with excellent imaging property.

L13 ANSWER 20 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 130:215954 MARPAT Full-text

TITLE: Liquid-crystal device containing cationic surfactant and liquid-crystal apparatus

INVENTOR(S): Noguchi, Koji; Hanyu, Yukio; Sato, Kimikazu; Nakamura, Shinichi; Mori, Yoshimasa; Yamada, Shuji; Terada, Tadahiro

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 53 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052383	A2	19990226	JP 1997-216956	19970729
PRIORITY APPLN. INFO.: JP 1997-216956 19970729				

AB The device has a liquid-crystal composition sandwiched by a pair of substrates, in which one of the substrate has an orientation-controlling film containing a cationic surfactant. A liquid-crystal display apparatus containing the device and its driving apparatus is also claimed. The device is useful for a chiral-smectic liquid-crystal imaging apparatus. The apparatus shows large driving margin.

L13 ANSWER 21 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 130:215953 MARPAT Full-text

TITLE: Liquid-crystal device having orientation-controlling film and its manufacture

INVENTOR(S): Maruyama, Tomoko; Nakazawa, Ikuo; Terada, Tadahiro

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 56 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052323	A2	19990226	JP 1997-216961	19970729
PRIORITY APPLN. INFO.: JP 1997-216961 19970729				

AB In the element comprising a liquid crystal composition sandwiched between a pair of substrates, the composition contains optically active compds., 21 component of which is localized near to the interface between the substrate and the composition. The element is manufactured by coating or scattering process of the optically active compds. on the substrate. The device having the element and a means for processing the element is also claimed. The element shows high switching speed without change of the speed after long-term use.

L13 ANSWER 24 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 130:189485 MARPAT Full-text

TITLE: Liquid-crystal device containing anionic surfactant and liquid-crystal apparatus

INVENTOR(S): Aoki, Yasushi; Terada, Tadahiro; Sato, Koichi

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 56 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052388	A2	19990226	JP 1997-216958	19970729
PRIORITY APPLN. INFO.: JP 1997-216958 19970729				

AB The device has a liquid-crystal composition sandwiched by a pair of substrates, in which one of the substrate has an orientation-controlling film containing an anionic surfactant. A liquid-crystal display apparatus containing the device and its driving apparatus is also claimed. The device is useful for a chiral-smectic liquid-crystal imaging apparatus. The apparatus shows large driving margin and high contrast.

L13 ANSWER 25 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 130:175383 MARPAT Full-text

TITLE: Liquid-crystal device containing surfactant and inorganic alkali salt and liquid-crystal apparatus

INVENTOR(S): Sato, Koichi; Hanyu, Yukio; Yamada, Shuji; Noguchi, Koji; Nakamura, Shinichi; Mori, Yoshimasa; Terada, Tadahiro; Shimizu, Yasushi

PATENT ASSIGNEE(S): Canon K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 56 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

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JP 11052390 A2 19990226 JP 1997-216960 19970729
 PRIORITY APPLN. INFO.: JP 1997-216960 19970729
 AB The device has a liquid-crystal composition sandwiched by a pair of substrates, in which one of the substrate has an orientation-controlling film containing a surfactant and an inorg. alkali salt. A liquid-crystal display apparatus containing the device and its driving apparatus is also claimed. The device is useful for a chiral-smectic liquid-crystal imaging apparatus. The apparatus shows large driving margin and excellent durability.

L13 ANSWER 26 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 130:175382 MARPAT Full-text
 TITLE: Liquid-crystal device containing polymer surfactant and liquid-crystal apparatus
 INVENTOR(S): Sato, Kimikazu; Hanyu, Yukio; Nakamura, Shinichi; Mori, Yoshimasa; Yamada, Shuji; Noguchi, Koji; Terada, Tadashi; Aoki, Yasufumi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 54 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052389	A2	19990226	JP 1997-216959	19970729

PRIORITY APPLN. INFO.: JP 1997-216959 19970729
 AB The device has a liquid-crystal composition sandwiched by a pair of substrates, in which one of the substrate has an orientation-controlling film containing a polymer surfactant. A liquid-crystal display apparatus containing the device and its driving apparatus is also claimed. The device is useful for a chiral-smectic liquid-crystal imaging apparatus. The apparatus shows large driving margin and excellent durability.

L13 ANSWER 27 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 130:175381 MARPAT Full-text
 TITLE: Liquid-crystal device containing anionic surfactant and liquid-crystal apparatus
 INVENTOR(S): Aoki, Yasufumi; Terada, Tadashi; Shimizu, Yasushi; Sato, Kimikazu
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 58 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11052387	A2	19990226	JP 1997-216957	19970729

PRIORITY APPLN. INFO.: JP 1997-216957 19970729
 AB The device has a liquid-crystal composition sandwiched by a pair of substrates, in which one of the substrate has an orientation-controlling film coated with an anionic surfactant-based layer. A liquid-crystal display apparatus containing the device and its driving apparatus is also claimed.

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L13 ANSWER 30 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 130:88254 MARPAT Full-text
 TITLE: Chiral smectic liquid crystal device and display
 INVENTOR(S): Shimizu, Yasushi; Nakazawa, Ikuo; Terada, Tadashi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 43 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10319380	A2	19981204	JP 1997-147082	19970522

PRIORITY APPLN. INFO.: JP 1997-147082 19970522
 AB The device comprises a liquid crystal layer sandwiched between a pair of electrodes, at least 1 of which having an oriented layer formed by rubbing, and a conducting polymer layer of volume resistivity $1 + 10^{-1} + 10^6$ Q-cm. Display device comprising the liquid crystal layer is also claimed. The device shows stable and durable driving characteristics.

L13 ANSWER 31 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 130:45439 MARPAT Full-text
 TITLE: Liquid-crystal display device containing cholesteric phase-free component or chiral smectic mixture and its manufacture
 INVENTOR(S): Yanagi, Michio; Maruyama, Tomoko
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10301117	A2	19981113	JP 1997-111494	19970428

PRIORITY APPLN. INFO.: JP 1997-111494 19970428
 AB The device comprise a pair of electrode-having facing substrates, one of which is laminated with a mono-oriented film and the other of which is laminated with a metal thin film. A cholesteric phase-free liquid crystal or a mixture of chiral smectic liquid crystals is sandwiched between the electrodes via the mono-oriented and metal films. The device is manufactured by (1) successively laminating an electrode and a mono-oriented film on a substrate, (2) continuously laminating an electrode and a metal thin film on the other substrate, (3) facing two substrates to face the deposit layer inside, and (4) placing a cholesteric phase-free liquid crystal or a mixture of chiral smectic liquid crystals between the substrates. The liquid crystals in the device shows uniform orientation and high response and the device gives high-quality, high-emission and high-contrast images.

L13 ANSWER 32 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 130:31245 MARPAT Full-text
 TITLE: Liquid crystal element

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The device is useful for a chiral-smectic liquid-crystal imaging apparatus
 The apparatus shows large driving margin and high contrast.

L13 ANSWER 28 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 130:131890 MARPAT Full-text
 TITLE: Liquid crystal display element containing conductive particles in its substrate
 INVENTOR(S): Gofuku, Itachiro; Ito, Yasuhiro; Terada, Tadashi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11014992	A2	19990122	JP 1997-164738	19970620

PRIORITY APPLN. INFO.: JP 1997-164738 19970620
 AB In the liquid crystal element comprising a liquid crystal sandwiched between a pair of substrates 21 of which has uniaxial orientation property, 21 of the substrate has a film with volume resistivity $1 + 10^5 - 1 + 10^{10}$ Ω -cm comprising conductive particles dispersed in an insulating material. The conductive particles have particle size 5-10 nm and form aggregates with minor axis 5-300 nm. The element shows high contrast and luminance and suitable for high-speed driving.

L13 ANSWER 29 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 130:103025 MARPAT Full-text
 TITLE: Liquid crystal element using substrate having impedance-controlled layer
 INVENTOR(S): Gofuku, Itachiro; Ito, Yasuhiro; Takashi, Etsuo; Terada, Tadashi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11014998	A2	19990122	JP 1997-164663	19970620

PRIORITY APPLN. INFO.: JP 1997-164663 19970620
 AB In the liquid crystal element comprising a liquid crystal sandwiched between a pair of substrates 21 of which has uniaxial orientation property, 21 of the substrate has an electrode and a layer having different elec. properties from that of the electrode and the impedance observed by applying voltage between the electrode and the layer satisfies $Z \leq c / ((\epsilon p) (d_i / d_l))$ (Z = ratio of the impedance observed by applying voltage in one direction and that by applying voltage in the other direction; ϵ = dielec. constant of the liquid crystal; t = basic pulse interval on driving the liquid crystal element; p = volume resistivity of the layer; d_i = thickness of the layer; d_l = thickness of the liquid crystal layer). The element has low hysteresis and burning is prevented.

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INVENTOR(S): Maruyama, Tomoko; Yanagi, Michio
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10301116	A2	19981113	JP 1997-111493	19970428

PRIORITY APPLN. INFO.: JP 1997-111493 19970428
 AB The liquid crystal element comprises a chiral smectic liquid crystal, the pair of substrates interposing the liquid crystal, an orientation film formed on at least one of the substrates, and an island-shape metal layer which is formed on at least one of the orientation film to reduce polar component of the surface energy. The island-shape layer may be made from Au, Ag, Pd, or Cu. The liquid crystal containing F does not show the cholesteric phase when temperature decreases.

L13 ANSWER 33 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 129:323916 MARPAT Full-text
 TITLE: Liquid crystal element and liquid crystal display device using it
 INVENTOR(S): Kurematsu, Katsumi; Terada, Tadashi; Ito, Yasuhiro
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10288786	A2	19981027	JP 1997-97634	19970415

PRIORITY APPLN. INFO.: JP 1997-97634 19970415
 AB In the element having plural pixels and liquid crystals sandwiched between a pair of substrates, one of which has active elements corresponding to pixels, the surface of the substrate is coated with an orientation-controlling layer without uniaxial orientation treatment. The surface of the other substrate which has no active element is coated with the layer with uniaxial orientation treatment. The active elements may be thin film transistors. The liquid crystal may be a chiral smectic composition containing a F-containing compound liquid crystal display device comprising the element, driving means, and a color backlight emitting 3 primary colors is also claimed. The element has less orientation defect and shows high contrast without generation of burning and fluctuation.

L13 ANSWER 34 OF 54 MARPAT COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 129:195873 MARPAT Full-text
 TITLE: Chiral smectic C liquid crystal cell including compound interacting with cation and displays therefrom
 INVENTOR(S): Yamada, Shuji; Noguchi, Koji; Nakamura, Shinichi; Sato, Kimikazu; Shinjo, Kenshi; Mori, Yoshimasa;

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PATENT ASSIGNEE(S): Maniu, Yukio
 SOURCE: Canon K. K., Japan
 Jpn. Kokai Tokkyo Koho, 51 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10195439	A2	19980728	JP 1996-358522	19961229

PRIORITY APPLN. INFO.:

AB The cell includes a chiral smectic liquid crystal composition having 22 stable phases and containing a compound which interacts with cations. The composition satisfies $0.990 \leq d_{min}/d_A$ wherein d_A represents an interlayer distance at the first transition point where the interlayer distance starts decreasing around the transition temperature of $S_{MA} \rightarrow S_{MC}$, and d_{min} represents the min. interlayer distance at the second transition point from which the distance will increase. The compound interacting with cations may be a compound containing an organic anion, an anionic surfactant, or a nonionic surfactant. The liquid crystal composition may contain a (latent) smectic liquid crystal compound wherein a fluorocarbon terminal and a hydrocarbon terminal are connected to each other via a core. The local switching error in the LCD is prevented.

L13 ANSWER 35 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 129:195871 MARPAT Full-text
 TITLE: Chiral smectic liquid crystal cell without switching error and display therefrom
 INVENTOR(S): Odera, Yasuto; Asao, Kyoshi; Mizutani, Hidemasa
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 54 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10195442	A2	19980728	JP 1996-358526	19961229

PRIORITY APPLN. INFO.:

AB The cell includes a chiral smectic liquid crystal composition having 22 stable phases and containing a compound which adsorbs polar substance. The composition satisfies $0.990 \leq d_{min}/d_A$ wherein d_A represents the interlayer distance at a 1st transition point from where the interlayer distance begins to decrease around the $S_{MA} \rightarrow S_{MC}$ transition temperature, and d_{min} represents the min. interlayer distance at the 2nd transition point from where the interlayer distance starts to increase. The adsorbent for polar substances may be a micropowd. inorg. oxide such as Al_2O_3 or SiO_2 . The liquid crystal composition may contain a (latent) smectic liquid crystal compound wherein a fluorocarbon terminal and a hydrocarbon terminal are connected to each other via a (Ph pyrimidine) core. A display device containing the composition is also claimed.

L13 ANSWER 36 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

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L13 ANSWER 38 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 128:302166 MARPAT Full-text
 TITLE: Liquid crystal element and its manufacture
 INVENTOR(S): Kamio, Yutaka; Tokunaga, Hiroyuki; Tsuda, Naonori; Tomono, Haruo; Matsuo, Yuji; Tsuboyama, Akira; Takao, Hideaki; Tsuzuki, Hidetoshi; Sato, Koichi; Inaba, Yutaka
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 58 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10082984	A2	19980331	JP 1997-178849	19970618
US 6154265	A	20001128	US 1997-878113	19970618

PRIORITY APPLN. INFO.:

AB The title liquid crystal element has thick auxiliary electrodes placed closer to transparent substrate than the main electrodes for assuring the smoothness of the orientation film and preventing the retard of the voltage wave. The liquid crystal composition contains a fluoro compound having a fluorocarbon terminal group and a hydrocarbon terminal group and showing a smectic intermediate phase or a potential smectic intermediate phase.

L13 ANSWER 39 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 128:237278 MARPAT Full-text
 TITLE: Chiral smectic liquid crystal element having polyimide orientation control film
 INVENTOR(S): Asaoka, Masanobu; Nakazawa, Ikuo; Terada, Tadashi; Takao, Hideaki; Nakamura, Shinichi; Sato, Kimiichi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 44 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10039313	A2	19980213	JP 1996-192204	19960722
JP 3192593	B2	20010730		
US 6001276	A	19991214	US 1997-896541	19970719
EP 821048	A2	19980128	EP 1997-305436	19970721
EP 821048	A3	19981028		
EP 821048	B1	20011031		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
 PRIORITY APPLN. INFO.: JP 1996-192204 19960722
 GI

ACCESSION NUMBER: 129:195870 MARPAT Full-text
 TITLE: Chiral smectic C liquid crystal cell including compound interacting with anion and displays therefrom
 INVENTOR(S): Yamada, Shuji; Noguchi, Koji; Sato, Kimikazu; Wakemura, Shinichi; Shinjo, Kenshi; Mori, Yoshimasa; Haseo, Yukio
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10195438	A2	19980728	JP 1996-358521	19961229

PRIORITY APPLN. INFO.:

AB The cell includes a chiral smectic liquid crystal composition having 22 stable phases and containing a compound which interacts with anions. The composition satisfies $0.990 \leq d_{min}/d_A$ wherein d_A represents the interlayer distance at a 1st transition point where the interlayer distance begins to decrease around the $S_{MA} \rightarrow S_{MC}$ transition temperature, and d_{min} represents the min. interlayer distance at a 2nd transition point from where the interlayer distance starts to increase. The compound interacting with anions may be a compound containing an organic cation, a cationic surfactant, an amphoteric surfactant, or a non-liquid-crystalline amine. The liquid crystal composition may contain a (latent) smectic liquid crystal compound wherein a fluorocarbon terminal and a hydrocarbon terminal are connected to each other via a (Ph pyrimidine) core. A display device containing the composition is also claimed. The local switching error in the LCD is prevented.

L13 ANSWER 37 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

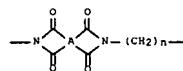
ACCESSION NUMBER: 129:129116 MARPAT Full-text
 TITLE: Liquid-crystal device with improved bistability and its manufacture
 INVENTOR(S): Asaoka, Masanobu; Terada, Tadashi; Nakazawa, Ikuo; Gofuku, Tachiro; Ito, Yasuhiro
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10177164	A2	19980630	JP 1996-353784	19961218

PRIORITY APPLN. INFO.:

AB In manufacture of the device, substrates before and after monoaxially orientation treatment are treated with a solvent while sonication and heated. The obtained device comprises a chiral smectic liquid-crystal composition containing a F-containing compound, having a (latent) smectic intermediate phase, containing a fluorocarbon terminal part and a hydrocarbon terminal part. The device showed good bistability and stable optical response characteristics.

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AB The liquid crystal element comprises a chiral smectic liquid crystal component containing a fluorocarbon end group, and a polyimide orientation control film having repeating unit structure I (A = 4 valent aliphatic hydrocarbon; n ≥ 1). The liquid crystal element provides high contrast, rapid response, high resolution, and high contrast.

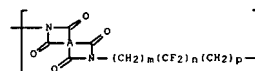
L13 ANSWER 40 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 128:223934 MARPAT Full-text
 TITLE: Liquid crystal element and display
 INVENTOR(S): Nakazawa, Ikuo; Terada, Tadashi; Asaoka, Masanobu
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10045908	A2	19980217	JP 1996-216980	19960731

PRIORITY APPLN. INFO.:

GI JP 1996-216980 19960731



AB The liquid crystal element has a liquid crystal layer between a pair of electrode- and orientation film-bearing substrates, wherein at least 1 orientation film is made of a polyimide of I (A = tetravalent aliphatic or aromatic hydrocarbon group; m, p = 1-3; n = 1-8). The liquid crystal layer is made of a chiral smectic liquid crystal composition

L13 ANSWER 41 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

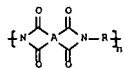
ACCESSION NUMBER: 128:210969 MARPAT Full-text
 TITLE: Liquid-crystal device having polyimide layer and display with high driving stability using it
 INVENTOR(S): Nakazawa, Ikuo; Terada, Tadashi; Asaoka, Masanobu; Shimizu, Yasushi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.

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DOCUMENT TYPE: CODEN: JKKXAF
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1 Japanese
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10048635	A2	19980220	JP 1996-216981	19960731
PRIORITY APPLN. INFO.:			JP 1996-216981	19960731

GI



AB The device has a layer of polyimide having a structural repeating unit I (A = 4-valent aliphatic or aromatic hydrocarbon; R = OH-substituted C2-8 n-alkylene) on 21 substrate. Preferably, the polyimide layer is an orientation-controlling layer. The device is useful as a light valve for flat panel displays, projection displays, and printers. The display using the device is also claimed. The displays shows less deterioration in driving margin, good orientation, and durability.

L13 ANSWER 42 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 128:193476 MARPAT Full-text
 TITLE: Liquid crystal components and display devices
 INVENTOR(S): Nakazawa, Ikuo; Terada, Tadahi; Asaoka, Masanobu; Shimizu, Yasushi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10045909	A2	19980217	JP 1996-216982	19960731

PRIORITY APPLN. INFO.:

AB Liquid crystal elements having reduced margin degradation due to afterimage and good driving stability and durability comprise fluorine-containing chiral smectic liquid crystal layer and a pair of substrate boards having an electrode and an polyimide orientation-control layer. The polyimides for the orientation-control layer are prepared from aliphatic or aromatic tetracarboxylic dianhydrides and diaminoxyalkylenes. The fluorine-containing chiral smectic liquid crystalline compds. are characterized by having a fluorocarbon terminal and a hydrocarbon terminal.

L13 ANSWER 43 OF 54 MARPAT COPYRIGHT 2006 ACS on STN

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suppresses the opposing elec. field effects and the display element shows the excellent switching properties.

L13 ANSWER 45 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 127:255439 MARPAT Full-text
 TITLE: Liquid-crystal device and display having poly(bipyridine) orientation film
 INVENTOR(S): Nakazawa, Ikuo; Ito, Yasuhiro; Hanyu, Yukio; Terada, Masahiro
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09211464	A2	19970815	JP 1996-34223	19960130

PRIORITY APPLN. INFO.:

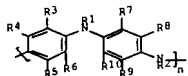
AB The liquid-crystal device contains a poly(2,2'-bipyridine-5,5'-diyl) film as a cell unit. The display using the device is also claimed. Adhesion of the orientation film was improved and the device showed high contrast and luminance.

L13 ANSWER 46 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 127:154763 MARPAT Full-text
 TITLE: Liquid crystal displays including chiral smectic liquid crystals and unidirectionally oriented polyaniline films
 INVENTOR(S): Nakazawa, Ikuo; Hanyu, Yukio; Asao, Yasushi; Ito, Yasuhiro; Asaoka, Masanobu; Takeda, Yasuaki; Moriyama, Takashi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09160045	A2	19970620	JP 1995-346303	19951213

PRIORITY APPLN. INFO.:

GI



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ACCESSION NUMBER: 127:301350 MARPAT Full-text
 TITLE: Liquid crystal device, its manufacture and liquid crystal apparatus
 INVENTOR(S): Hanyu, Yukio; Asaoka, Masanobu; Terada, Masahiro; Nakazawa, Ikuo; Yamada, Nobutsugu; Seto, Koichi; Shinjo, Kenji; Mori, Yoshimasa; Noguchi, Koji; Nakamura, Shinichi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 46 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09236806	A2	19970909	JP 1997-356	19970106
JP 3295801	B2	20020624		
US 5885482	A	19990323	US 1996-775792	19961227

PRIORITY APPLN. INFO.:

JP 1995-352162 19951228
 JP 1995-352261 19951228

AB In the title device including a substrate containing an uniaxially rubbed orientation layer, a substrate containing a non-rubbed orientation layer, and spacers interposed between the above substrates, the spacers are surface-treated with the material which constitutes the non-rubbed orientation layer. The spacers may be silica beads or heat-curable epoxy resin. The uniaxially rubbed orientation layer may be made up of polyamides (Markush structure given), the non-rubbed orientation layer may contain a silane coupling agent, F-containing polymer, silicone polymer binder, and/or conductive microparticles. The liquid crystals of the device may be F-containing and group-containing chiral smectic liquid crystals (Markush structure given). The device shows excellent switching properties.

L13 ANSWER 44 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 127:285992 MARPAT Full-text
 TITLE: Liquid crystal display element having book-shelf type structure
 INVENTOR(S): Ito, Yasuhiro; Moriyama, Takashi; Asao, Yasushi; Takeda, Yasuaki; Nakazawa, Ikuo; Asaoka, Masanobu; Hanyu, Yukio
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 43 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09222606	A2	19970826	JP 1996-333477	19961213
JP 3218426	B2	20011015		

PRIORITY APPLN. INFO.:

AB The liquid crystal element comprises a chiral smectic liquid crystal component between a pair of substrates, wherein an orientation controlling film locates on a side of the substrate facing the liquid crystal and consists of an amide polymer and polypyridine. The composition of the orientation control film

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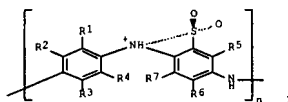
AB The title displays, showing defect-free orientation and sharp threshold-voltage characteristics, include pair of electrodes sandwiching chiral smectic liquid crystals via films of polyaniline derivative having repeating unit I (R1-10 = H, Cl-6 alkyl (oxy); R1 and/or R2 is alkyl (oxy) when all substituents of R3-10 are H). The polyaniline derivative films may be rubbed and work as unidirectionally oriented alignment films. The liquid crystals may include compds. having 2 end chains of fluorocarbons and hydrocarbons bonded via center cores (of phenylpyrimidines).

L13 ANSWER 47 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 127:142919 MARPAT Full-text
 TITLE: Liquid-crystal display device having polyaniline film
 INVENTOR(S): Nakazawa, Ikuo; Hanyu, Yukio; Asao, Yasushi; Asaoka, Masanobu; Ito, Yasuhiro; Moriyama, Takashi; Takeda, Yasuaki
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09160047	A2	19970620	JP 1995-346304	19951213

PRIORITY APPLN. INFO.:

GI



AB The device has a polyaniline derivative film having a structural repeating unit I (R1-7 = H, Cl-6 alkyl, alkoxy). The device showed good temperature characteristics of driving margin and gave high-contrast images.

L13 ANSWER 48 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 127:128792 MARPAT Full-text
 TITLE: Liquid crystal displays including chiral smectic liquid crystals and Langmuir-Blodgett films
 INVENTOR(S): Hanyu, Yukio; Takeda, Yasuaki; Moriyama, Takashi; Ito, Yasuhiro; Nakazawa, Ikuo; Asaoka, Masanobu; Asao, Yasushi
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.

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DOCUMENT TYPE: CODEN: JKKXAF
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09160044	A2	19970620	JP 1995-346311	19951213

PRIORITY APPLN. INFO.: JP 1995-346311 19951213

AB The displays, showing good switching property, include pair of electrodes sandwiching chiral smectic liquid crystals via oriented elec.-conductive base films and 55-μm-thickness alignment films preferably of Langmuir-Blodgett (LB) films. The liquid crystals may include compds. having 2 end chains of fluorocarbons and hydrocarbons bonded via center cores (preferably of phenylpyrimidine).

L13 ANSWER 49 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 127:128772 MARPAT Full-text
 TITLE: Liquid crystal element and liquid crystal device
 INVENTOR(S): Asaka, Masanobu; Gofuku, Itachiro; Ito, Yasuhiro; Nakazawa, Ikuo; Terada, Masahiro
 PATENT ASSIGNEE(S): Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09152611	A2	19970610	JP 1995-334279	19951130

PRIORITY APPLN. INFO.: JP 1995-334279 19951130

AB In the title liquid crystal element comprising two substrates and a chiral smectic liquid crystal composition (which has no cholesteric phase) in the space between the two substrates, the first substrate has an orientation film which has been subjected to rubbing treatment, the second substrate has a film comprising 2 or more binder materials; at least one of said binder materials occupies 3 to 30 weight% of the total amount of all binder materials and is present in larger concentration on the surface contacting the liquid crystals than on other parts. The title element contains phenylpyrimidine liquid crystals having fluorinated hydrocarbon chains (Markush structure given). The title element shows high contrast.

L13 ANSWER 50 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 126:13050 MARPAT Full-text
 TITLE: Electrophotographic migration imaging member
 INVENTOR(S): Malhotra, Shadi L.; Chen, Liqin; Perron, Marie-Eve
 PATENT ASSIGNEE(S): Xerox Corp., USA
 SOURCE: U.S., 144 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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AB Disclosed is a process which comprises (a) providing a migration imaging member comprising (1) a substrate and (2) a softenable layer comprising a softenable material and a photosensitive migration marking material present in the softenable layer as a monolayer of particles situated at or near the surface of the softenable layer spaced from the substrate, (b) uniformly charging the imaging member, (c) imagewise exposing the charged imaging member to activating radiation at a wavelength to which the migration marking material is sensitive, (d) causing the softenable material to soften and enabling a first portion of the migration marking material to migrate through the softenable material toward the substrate in an imagewise pattern while a second portion of the migration marking material remains substantially unmigrated within the softenable layer, and (e) contacting the second portion of the migration marking material with a transparentizing agent which transparentizes the migration marking material.

L13 ANSWER 52 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 123:127796 MARPAT Full-text
 TITLE: Liquid crystal compounds having a fluoroether terminal portion
 INVENTOR(S): Janulis, Eugene P.; Johnson, Gilbert C.; Radcliffe, Marc D.; Savu, Patricia M.; Snustad, Daniel C.; Spawn, Terence D.
 PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA
 SOURCE: U.S., 25 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5399291	A	19950321	US 1993-129258	19930930
FI 9404002	A	19950331	FI 1994-4002	19940831
AU 9472806	A1	19950413	AU 1994-72806	19940902
AU 683282	B2	19971106		
CA 2131499	AA	19950331	CA 1994-2131499	19940906
JP 07180660	A2	19950725	JP 1994-226519	19940921
EP 646636	A1	19950405	EP 1994-115407	19940929
EP 646636	B1	20000823		

R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE
 ES 2149229 T3 20001101 ES 1994-115407 19940929
 PRIORITY APPLN. INFO.: US 1993-129258 19930930

AB The F-containing, chiral and achiral liquid crystal compds. comprise (a) an aliphatic fluorocarbon terminal portion comprising a perfluorinated or partially-fluorinated alkylene group and a terminal hydrocarbon alkyl group, the groups optionally containing 21 catenary ether O atom; (b) an aliphatic hydrocarbon terminal portion; and (c) a central core connecting the terminal portions. The compds. have smectic mesophases or latent smectic mesophases and are useful, for example, in liquid crystal display devices.

L13 ANSWER 53 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 115:135807 MARPAT Full-text
 TITLE: Process for producing 3-substituted thio-3-cephem compounds
 INVENTOR(S): Yamamoto, Yuichi; Okonogi, Tsuneo; Shibahara, Seiji; Inoue, Shigeharu
 PATENT ASSIGNEE(S): Meiji Seika Kaisha, Ltd., Japan

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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5563014	A	19961008	US 1995-442227	19950515
CA 2170298	AA	19961116	CA 1996-2170298	19960226
CA 2170298	C	20011002		
JP 08314241	A2	19961129	JP 1996-113457	19960508
BR 9602246	A	19980113	BR 1996-2246	19960514

PRIORITY APPLN. INFO.: US 1995-442227 19950515

AB Disclosed is a migration imaging member comprising (a) a substrate, (b) a softenable layer comprising a softenable material and a photosensitive migration marking material, and (c) a transparentizing agent which transparentizes the migration marking material in contact therewith contained in at least one layer of the migration imaging member. Also disclosed is a process which comprises (1) providing a migration imaging member comprising (a) a substrate, (b) a softenable layer comprising a softenable material and a photosensitive migration marking material, and (c) a transparentizing agent which transparentizes the migration marking material in contact therewith contained in at least one layer of the migration imaging member, (2) uniformly charging the imaging member, (3) exposing the charged imaging member to an activating radiation at a wavelength to which the migration marking material is sensitive, and (4) causing the softenable material to soften and enabling a first portion of the migration marking material to migrate through the softenable material toward the substrate in an imagewise pattern while a second portion of the migration marking material remains substantially unmigrated within the softenable layer, wherein subsequent to migration of the first portion of migration marking material, either (a) the first portion of migration marking material contacts the transparentizing agent and the second portion of migration marking material does not contact the transparentizing agent or (b) the second portion of migration marking material contacts the transparentizing agent and the first portion of migration marking material does not contact the transparentizing agent.

L13 ANSWER 51 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 125:127644 MARPAT Full-text
 TITLE: Method for obtaining improved image contrast in migration imaging members
 INVENTOR(S): Limburg, William W.; Mammino, Joseph; Liebermann, George; Griffiths, Clifford H.; Shahin, Michael M.; Malhotra, Shadi L.; Chen, Liqin; Perron, Marie-Eve
 PATENT ASSIGNEE(S): Xerox Corp., USA
 SOURCE: U.S., 147 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5514505	A	19960507	US 1995-441360	19950515
CA 2169980	AA	19961116	CA 1996-2169980	19960221
CA 2169980	C	20010424		
JP 08314240	A2	19961129	JP 1996-113456	19960508
EP 743573	A2	19961120	EP 1996-303359	19960514
EP 743573	A3	19970305		
EP 743573	B1	20000906		

R: DE, FR, GB

PRIORITY APPLN. INFO.: US 1995-441360 19950515

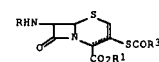
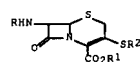
82

SOURCE: PCT Int. Appl., 41 pp.
 CODEN: PIXK2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9109037	A1	19910627	WO 1990-JP1599	19901207
W: US				
FR: DE, ES, FR, GB, IT				
JP 01178980	A2	19910802	JP 1989-316424	19891207
JP 06086459	B4	19941102		
EP 504404	A1	19920923	EP 1991-900053	19901207
EP 504404	B1	19970806		
R: DE, ES, FR, GB, IT				
ES 2104688	T3	19971016	ES 1991-900053	19901207
US 5294705	A	19940315	US 1992-853730	19920603
PRIORITY APPLN. INFO.: JP 1989-316424 19891207				
WO 1990-JP1599 19901207				

OTHER SOURCE(S): CASREACT 115:135807

GI



AB Title compds. I (R = acyl, R1 = carboxy protective group; R2 = alkyl, cycloalkyl, heterocyclyl, heterocyclylmethyl) were prepared by reaction of acylthiocephemcarboxylates II [R, R1 = same as above; R3 = alkyl, (un)substituted aryl] with R2X (X = leaving group) in the presence of a secondary amine and a tertiary amine. Thus, stirring p-nitrobenzyl 7-phenylacetamido-3-acetylthio-3-cephem-4-carboxylate with Et3N and morpholine in DMF and benzene at 5° for 10 min followed by stirring with Me2SO for 10 min gave 73% p-nitrobenzyl 7-phenylacetamido-3-methylthio-3-cephem-4-carboxylate.

L13 ANSWER 54 OF 54 MARPAT COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 113:96027 MARPAT Full-text
 TITLE: Method, detergent, and cleaving agent for reversible alteration of hydrophilic properties of a material
 INVENTOR(S): Switchenko, Arthur C.; Kurn, Nurith; Ullman, Edwin F.; Pirio, Marcel; Berger, Donald E., Jr.; Neukom, Christian
 PATENT ASSIGNEE(S): Syntex (U.S.A.), Inc., USA
 SOURCE: Ger. Offen., 20 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3924443	A1	19900208	DE 1989-3924443	19890724
US 5116726	A	19920526	US 1988-223501	19880725
FR 2634394	A1	19900126	FR 1989-9943	19890724
FR 2634394	B1	19940128		
GB 2221989	A1	19900221	GB 1989-16886	19890724
GB 2221989	B2	19931027		
JP 02111757	A2	19900424	JP 1989-191227	19890724
JP 2892692	B2	19990517		
CA 1340353	A1	19990126	CA 1989-606510	19890724
US 5563038	A	19961008	US 1993-154340	19931118
US 5670690	A	19970923	US 1995-455920	19950531
US 5840508	A	19981124	US 1995-455424	19950531
PRIORITY APPLN. INFO.:				US 1988-223501 19880725
				US 1992-879655 19920506
				US 1993-154340 19931118
AB Antibodies, receptors, and microbial antigens are solubilized, and their hydrophilic properties are enhanced, by treatment with a detergent L-J [L = lipophilic moiety YAZ; J = hydrophilic moiety comprising an acid (e.g. OSO ₃ H, SO ₃ H, CO ₂ H, P(O)(OR)OH, OP(O)(OR)OH) or a salt thereof; Y = C2-12 alkyl, alkenyl, or alkynyl or C7-12 aralkyl, aralkenyl, or aralkynyl; A = S, Se, CH ₃ , CH ₂ CH ₂ CH ₂ , OCH ₂ CH ₂ , SCH ₂ CH ₂ , SS, SO ₂ CH ₂ CH ₂ , ketal group, SiR ₂ O, OSiR ₂ O; X = Cl, Br, I; Z = (unsaturated C1-10 alkylene, C7-10 aralkylene; R = H, lower alkyl). Anal. test kits which contain L-J for solubilization of the analyte are described. L-J may subsequently be inactivated by nucleophilic cleavage (with e.g. a thiosulfate, mercapto acid, thiourea, hydroxylamine, hydrazine, hydrazide, or NH ₃), oxidation (with e.g. a peroxide, per acid, hypochlorite, or hypobromite), or reduction (with e.g. a sulfite, hyposulfite, or mercaptan). L-J and the cleaving agent may also be applied for reversible wetting of hydrophobic surfaces. Thus, cell surface antigens of Neisseria gonorrhoeae were solubilized in buffer containing 0.5% Me(CH ₂) ₅ S(CH ₂) ₂ SO ₃ Na, the detergent was oxidized with 1% H ₂ O ₂ , and the antigens were adsorbed on a nitrocellulose filter and treated with rabbit anticonococcal antiserum and peroxidase-labeled goat anti-rabbit IgG for colorimetric determination of the antigen by addition of dicarboxidine and H ₂ O ₂ . A related detergent, Me(CH ₂) ₆ S(CH ₂) ₂ SO ₃ Na, was prepared by reaction of Me(CH ₂) ₆ SH with NaH and Cl(CH ₂) ₆ OH and esterification with ClSO ₃ H.				

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PRIORITY APPLN. INFO.:				
		KR 2005-130616	20051227	
		KR 2005-13526	20050218	
		KR 2005-70970	20050803	
AN	2006-621178 [64]	WPIDS		
AB	US 20060204856 A1	UPAB: 20061005		
NOVELTY - An organic electrolytic solution contains a lithium salt, an organic solvent and a surfactant containing a hydrophobic portion having an aromatic group. The organic solvent contains solvent (I) having high dielectric constant, and solvent (II) having low boiling point.				
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for lithium battery (1), which has a cathode (2), an anode (3), and the organic electrolytic solution.				
USE - For lithium battery (claimed) used in portable electronic devices such as video cameras, cellular phones, and notebook computer.				
ADVANTAGE - The organic electrolytic solution suppresses side reactions on the surfaces of anodes, and maintains the reliability of charging and discharging reactions of battery.				
DESCRIPTION OF DRAWINGS - The figure shows the schematic diagram of the lithium battery.				
Lithium battery (1)				
Cathode (2)				
Anode (3)				
Separator (4)				
Battery case (5)				

L30 ANSWER 2 OF 45 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2006-362215 [37] WPIDS
 DOC. NO. CPI: C2006-117700 [37]
 DOC. NO. NON-CPI: N2006-306064 [37]
 TITLE: Ink composition for inkjet printing, comprises aqueous vehicle and modified pigment comprising specific pigment

DERWENT CLASS: A13; A25; A97; G02; T04
 INVENTOR: CHEN X; LAKE G A; MA Z; SARKISIAN G M; TU Y
 PATENT ASSIGNEE: (CHEN-I) CHEN X; (LAKE-I) LAKE G A; (MA-Z) MA Z; (SARK-I) SARKISIAN G M; (YU-Y-I) YU Y
 COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20060106132	A1	20060518	(200637)	EN	20[8]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20060106132	A1	Provisional	US 2004-621501P 20041022
US 20060106132	A1		US 2005-240431 20050930

PRIORITY APPLN. INFO.:

AN 2006-362215 [37] WPIDS
 AB US 20060106132 A1 UPAB: 20060612
 NOVELTY - The ink composition comprises an aqueous vehicle and a modified pigment comprising specific pigment.

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FILE 'JICST-EPLUS' ENTERED AT 12:15:41 ON 04 DEC 2006
 COPYRIGHT (C) 2006 Japan Science and Technology Agency (JST)

FILE 'JAFIO' ENTERED AT 12:15:41 ON 04 DEC 2006
 COPYRIGHT (C) 2006 Japanese Patent Office (JPO)- JAFIO

L14	162	SEA ABB=ON	PLU=ON	"BOUVIER E77/AU
L15	269	SEA ABB=ON	PLU=ON	("COPTON B7" OR "COMPTON B7")/AU
L16	449	SEA ABB=ON	PLU=ON	"GESLER J77/AU
L17	191	SEA ABB=ON	PLU=ON	"GILAR M77/AU
L18	27791	SEA ABB=ON	PLU=ON	"YU Y77" OR "YING Y77")/AU
L19	25309	SEA ABB=ON	PLU=ON	"LEE P77/AU
L20	17049	SEA ABB=ON	PLU=ON	"BROWN E77/AU
L21	2	SEA ABB=ON	PLU=ON	L14 AND L15 AND L16 AND L17 AND L18 AND L19 AND L20
L22	37	SEA ABB=ON	PLU=ON	L14 AND (L15 OR L16 OR L17 OR L18 OR L19 OR L20)
L23	16	SEA ABB=ON	PLU=ON	L15 AND (L16 OR L17 OR L18 OR L19 OR L20)
L24	115	SEA ABB=ON	PLU=ON	L16 AND (L17 OR L18 OR L19 OR L20)
L25	32	SEA ABB=ON	PLU=ON	L17 AND (L18 OR L19 OR L20 OR L21)
L26	45	SEA ABB=ON	PLU=ON	L18 AND (L19 OR L20)
L27	10	SEA ABB=ON	PLU=ON	L19 AND L20
L28	53	SEA ABB=ON	PLU=ON	(L22 OR L24 OR L25 OR L26 OR L14 OR L15 OR L16 OR L17 OR L18 OR L19 OR L20) AND (SURFACTANT OR SURFACE (1A) ACTIVE) (L) (REACT7 OR RXN)
L29	73	SEA ABB=ON	PLU=ON	L21 OR L23 OR L27 OR L28
L30	45	DUP REM	L29	(28 DUPLICATES REMOVED)

L30 ANSWER 1 OF 45 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2006-621178 [64] WPIDS
 DOC. NO. CPI: C2006-191633 [64]
 DOC. NO. NON-CPI: N2006-500440 [64]
 TITLE: Organic electrolytic solution for lithium battery, contains lithium salt, surfactant containing hydrophobic portion having aromatic group, and organic solvents of preset properties
 L03; X16
 DERWENT CLASS: CHOE J Y; CHOI J; I E S; I S S; KIM D; KIM T Y; LEE E; LEE S; RYU Y; SONG S; SONG S H; TU Y K
 PATENT ASSIGNEE: (SMSU-C) SAMSUNG DENKANG KK; (CHOI-I) CHOI J; (KIMD-I) KIM D; (LEE-I) LEE E; (LEES-I) LEE S; (RYUY-I) RYU Y; (SONG-I) SONG S
 COUNTRY COUNT: 2

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20060204856	A1	20060914	(200664)	EN	15[5]	
JP 2006228741	A	20060831	(200664)	JA	26	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20060204856	A1		US 2006-357429 20060217
JP 2006228741	A		JP 2006-42628 20060220

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DETAILED DESCRIPTION - The ink composition comprises an aqueous vehicle and a modified pigment comprising pigment of formula (A). PG=polyethylene glycol or polypropylene glycol; D=pigment; and m,n,o,p= integers
 the ratio of n and m is 1.1-4:1. o and p have value about 5-100% of the value of m. An INDEPENDENT CLAIM is included for the manufacturing method of ink composition. The method involves admixing a pigment having polymeric binder with an aqueous vehicle to form an ink fluid, and admixing unattached polymeric binder with the ink fluid. The polymeric binders attached to the pigment are chemically similar to the unattached polymeric binders.
 USE - For inkjet printing.
 ADVANTAGE - The ink composition has excellent stability and compatibility with several solvents. The ink composition has reduced viscosity and favorable rheological properties. The ink composition provides image having high glossiness and uniform density.

L30 ANSWER 3 OF 45 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN
 DUPLICATE 1

ACCESSION NUMBER: 2006561204 EMBASE Full-text
 TITLE: of the sea urchin Strongylocentrotus purpuratus.
 AUTHOR: Sodergren E.; Weinstock G.M.; Davidson E.H.; Cameron R.A.; Gibbs R.A.; Angerer R.C.; Angerer L.M.; Arnone M.I.; Burgess D.R.; Burke R.D.; Coffman J.A.; Dean M.; Elphick M.R.; Ettensohn C.A.; Foltz K.R.; Hamdoun A.; Hynes R.O.; Klein W.H.; Marzluff W.; McClell D.R.; Morris R.L.; Mushegian A.; Raat J.P.; Smith L.C.; Thorndyke M.C.; Vacquier V.D.; Wessel G.M.; Wray G.; Zhang L.; Elisk C.G.; Ermolaeva O.; Hlavina W.; Hofmann G.; Kitta P.; Landrum M.J.; Mackey A.J.; Maglott D.; Panopoulou G.; Poustka A.J.; Pruitt K.; Sapozhnikov V.; Song X.; Souvovov A.; Solovov V.; Wei Z.; Whitaker C.A.; Worley K.; Durbin K.J.; Shen Y.; Fedrigo O.; Garfield D.; Haygood R.; Primus A.; Satiya R.; Severson T.; Gonzalez-Garay M.L.; Jackson A.R.; Milosavljevic A.; Tong M.; Killian C.E.; Livingston B.T.; Wilt F.H.; Adams N.; Belle R.; Carbonneau S.; Cheung R.; Cormier P.; Cosson B.; Croce J.; Fernandez-Guerra A.; Genevieve A.-M.; Gohl M.; Kalkat H.; Morales J.; Mulner-Lorillon O.; Robertson A.J.; Goldstone J.V.; Cole B.; Epel D.; Gold B.; Hahn M.E.; Howard-Ashby M.; Scally M.; Stegeman J.J.; Allgood E.L.; Cool J.; Judkins K.M.; McCafferty S.S.; Musante A.M.; Obar R.A.; Rawson A.P.; Rossetti B.J.; Gibbons I.R.; Hoffman M.P.; Leone A.; Istrail S.; Materna S.C.; Samanta M.P.; Stolz V.; Tongprasit W.; Tu Q.; Bergeron K.-F.; Brandhorst B.P.; Whittle J.; Berney K.; Bottjer D.J.; Calasanti C.; Peterson W.; Chow E.; Yuan Q.A.; Eliaik E.; Graur D.; Reese J.T.; Bondat I.; Heasun S.; Marra M.A.; Schein J.; Anderson M.K.; Brockton V.; Buckley K.M.; Cohen A.H.; Fugmann S.D.; Hibino T.; Loza-Coll M.; Majeske A.J.; Messier C.; Nair S.V.; Pancer Z.; Terwilliger D.P.; Agca C.; Arboleda E.; Chen N.; Churcher A.M.; Hallbook F.; Humphrey G.W.; Idris M.M.; Kiyama T.; Liang S.; Mellott D.; Mu K.; Murray G.; Olsinski R.P.; Raible F.; Rowe M.; Taylor J.E.; Tesmar-Raible K.; Wang D.; Wilson K.H.; Yaguchi S.; Gasterland T.; Galindo B.E.; Gunaratne H.J.; Juliano C.; Kinukawa M.; Moy G.W.; Neill A.T.; Nomura M.; Raish M.; Reade A.;

Roux M.M.; Song J.L.; Su Y.-H.; Townley I.K.; Voronina E.; Wong J.L.; Amore G.; Branno M.; Brown B.R.; Cavalieri V.; Duboc V.; Duloquin L.; Flytzanis C.; Geche C.; Lapraz F.; Lepage T.; Locascio A.; Martinez P.; Matassi G.; Matranga V.; Range R.; Rizzo F.; Rottinger E.; Wilson K.; Beane W.; Bradham C.; Byrum C.; Glenn T.; Hussain S.; Lora M.; Manning G.; Miranda E.; Thomson R.; Walton K.; Wikramanayake A.; Whittaker C.; Wu S.-Y.; Xu R.; Brown C.T.; Chen L.; Gray R.F.; Lee P.Y.; Nam J.; Oliveri P.; Smith J.; Muzny D.; Bell S.; Chacko J.; Cree A.; Curry S.; Davis C.; Dinh H.; Dugan-Rocha S.; Fowler J.; Gill R.; Hamilton C.; Hernandez J.; Hines S.; Hume J.; Jackson L.; Jolivet A.; Kovar C.; Lee S.; Lewis L.; Miner G.; Morgan M.; Nazareth L.V.; Okwuonu G.; Parker D.; Pu L.-L.; Thorn R.; Wright R.

CORPORATE SOURCE: G.W. Weinstock, Human Genome Sequencing Center, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, United States. gwstoc@bcm.tmc.edu

SOURCE: Science, (10 Nov 2006) Vol. 314, No. 5801, pp. 941-952.

Refs: 54
ISSN: 0036-8075 E-ISSN: 1095-9203 CODEN: SCIEAS

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 30 Nov 2006

Last Updated on STN: 30 Nov 2006

AB We report the sequence and analysis of the 814-megabase genome of the sea urchin *Strongylocentrotus purpuratus*, a model for developmental and systems biology. The sequencing strategy combined whole-genome shotgun and bacterial artificial chromosome (BAC) sequences. This use of BAC clones, aided by a pooling strategy, overcame difficulties associated with high heterozygosity of the genome. The genome encodes about 23,300 genes, including many previously thought to be vertebrate innovations or known only outside the deuterostomes. This echinoderm genome provides an evolutionary outgroup for the chordates and yields insights into the evolution of deuterostomes.

L30 ANSWER 4 OF 45 HCAPIUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:827234 HCAPIUS Full-text

TITLE: Transport and separation of Cu(II) by N902 -kerosene-HCl strip dispersion hybrid liquid membrane

AUTHOR(S): Tu, Yuan-De; Gu, Shu-Xiang; Luo, Xiao-Lian; Ma, Ming; He, Ding-Sheng

CORPORATE SOURCE: College of Chemistry and Chemical Engineering, Hunan Normal University, Changsha, 410081, Peop. Rep. China

SOURCE: Yingyong Huaxue (2006), 23(7), 766-769

CODEN: YIHUED; ISSN: 1000-0518

PUBLISHER: Kexue Chubanshe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB A novel liquid membrane system, denoted as strip dispersion hybrid liquid membrane (SDHLM), containing N902 in kerosene as carrier, was studied as the function of dodecanol concentration, pH in feed phase, volume ratio between stripping solution and organic phase, and circulating flux of feed phase or

strip dispersion phase. Solvent extraction verified that 1 mol of Cu²⁺ ions reacted with 2 mol of carrier and formed 1 mol of the Cu(II)-carrier complex. The expts. showed that Cu(II) could be efficiently transported into the stripping solution by SDHLM. When pH = 2 in the feed phase, the recovery of copper(II) in the stripping phase was 93.64, while iron(III) was 1.83% for Cu²⁺/Fe³⁺ = 1. The recovery of copper(II) in the stripping phase was 89.8%, while overdot,zinc(II) was 1.38% for Cu²⁺/Zn²⁺ = 1 after transport for 4 h. When the concns. of Cu²⁺, Fe³⁺, Co²⁺, Ni²⁺ and Zn²⁺ in the feed phase (pH = 1.5) were 4.52, 5.07, 0.442, 35.7 and 1.24 g/L, resp., the recovery of Cu²⁺ in the stripping phase was 81.5%, while other metal ions were below 2.10% after the transport for 6 h. Separation expts. indicated that N902 was an excellent extractant for Cu(II). SDHLM has several advantages over SLM and ELM: increased membrane stability, improved flux, improved recovery of target species concentration, no usage of high active surfactant and demulsification device, and reduced cost.

L30 ANSWER 5 OF 45 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 2005-194922 [20] WPIDS

CROSS REFERENCE: 2003-585066

DOC. NO. CPI: C2005-061557 [20]

DOC. NO. NON-CPI: N2005-161094 [20]

TITLE: Test strip for determining concentration of analyte e.g. glucose in physiological sample comprises fluid transfer element having two areas with different thickness where second area transfers minimal sample volume to reaction area

DERWENT CLASS: A89; B04; S03

INVENTOR: MATZINGER D; QURAISHI K R; YU Y S

PATENT ASSIGNEE: (MATZ-I) MATZINGER D; (QURA-I) QURAISHI K R; (YUYS-I) YU Y S

COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20050042135	A1	20050224	(200520)*	EN	19[5]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20050042135	A1 Div Ex	US 2001-946215	20010905
US 20050042135	A1	US 2004-938965	20040910

PRIORITY APPLN. INFO: US 2004-938965 20040910

US 2001-946215 20010905

AN 2005-194922 [20] WPIDS

CR 2003-585066

AB US 20050042135 A1 UPAB: 20050708

NOVELTY - A test strip (2) comprises a fluid transfer element (10) for transferring the sample to a reaction area (8) of the strip. The fluid transfer element comprises two areas (12, 14) having different thickness. The second area is capable of being saturated with a sample volume of 1 - 7 microl and transfers 0.1 - 5 microl of sample to reaction area of the strip. The second area further comprises a lumen.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) making the test strip;

(2) making a transport element of a test strip; and (3) a kit for determining the concentration of analyte in physiological sample.

USE - The test strip is useful for determining the concentration of analyte in physiological sample (claimed), e.g. glucose, cholesterol, lactate, alcohol in samples e.g. blood, urine, tears, saliva.

ADVANTAGE - The test strip provides a simple, quick and convenient way to obtain physiological sample and determine analyte concentration. The sample fed to transport element via sides of the transport element and such sample feeding enables the user to view the transport element, i.e. the transport element is unobstructed by the user's finger or other device containing the sample, such as capillary tube, where such unobstructed viewing enables visualization of when the transport element is saturated with sample and hence avoiding over-filling of the transport element which may cause incorrect analyte concentration readings. The strip is easy to use and efficiently determines the concentration of glucose with minimal pain. DESCRIPTION OF DRAWINGS - The figure shows an exploded view of test strip.

Test strip (2)
Support layer (4)
Reaction area (8)
Transport element (10)
First area (12)
Second area (14)

L30 ANSWER 6 OF 45 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 2006-373730 [39] WPIDS

DOC. NO. CPI: C2006-120776 [39]

TITLE: High-temperature gas composite oxide desulfurizer

DERWENT CLASS: H09

INVENTOR: BIAN W; BU X; DENG Y; DU M; GONG Z; JI X; LI W; LIU Y; PENG W; WANG P; WEN F; XIN S; XU Z; YING Y

; ZHANG C

PATENT ASSIGNEE: (COAL-N) COAL GEN ACAD

COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
CN 1712500	A	20051228	(200639)*	ZH	[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
CN 1712500 A		CN 2004-10047891	20040621

PRIORITY APPLN. INFO: CN 2004-10047891 20040621

AN 2006-373730 [39] WPIDS

AB CN 1712500 A UPAB: 20060620

NOVELTY - A high-temperature gas composite oxide desulfurizer comprises an active component zinc oxide (33-50%) and multiple additives (31-51%) comprising titanium dioxide, active stabilizer, surface modifier, strength reinforcer, regenerative improver and composite binder. The process is carried out by mixing the active component with additives, grinding, kneading, forming, laying aside, drying, particle rectifying, calcining at 850-1060degreesC in a high-temperature furnace, and obtaining the desulfurizer. USE - Used in fixed bed, fluidized bed or desulfurizing reactors of flowing bed.

ADVANTAGE - The desulfurizer has improved reactivity and efficiency, and good abrasion resistance and regeneration.

L30 ANSWER 7 OF 45 HCAPIUS COPYRIGHT 2006 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2005:842699 HCAPIUS Full-text

DOCUMENT NUMBER: 143:342133

TITLE: A rapid sample preparation method for mass spectrometric characterization of N-linked glycans

AUTHOR(S): Yu, Ying Qing; Gilar, Martin;

Kaska, Jennifer; Gombler, John C.

CORPORATE SOURCE: Life Sciences R&D, Waters Corporation, Milford,

MA, 01757, USA

SOURCE: Rapid Communications in Mass Spectrometry (2005),

19(16), 2331-2336

CODEN: RCMSEF; ISSN: 0951-4198

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A rapid method for anal. of glycans of glycoproteins is presented. This method comprised deglycosylation, sample cleanup and matrix-assisted laser desorption/ionization mass spectrometry (MALDI-MS) anal. of glycans. The enzymic deglycosylation of N-linked glycoproteins was enhanced in terms of speed and reproducibility using an enzyme-friendly surfactant. The released glycans were desalted using a micro-scale solid phase extraction (SPE) device packed with a hydrophilic interaction chromatog. (HILIC) sorbent. Hydrophilic glycans were well retained by SPE, while salts and surfactants were removed from the sample. The glycans were eluted using 25-50 µL of solvent and analyzed directly without derivatization using MALDI-MS. MALDI quadrupole time-of-flight (Q-ToF) instrumentation was utilized for glycan profiling and structure characterization by tandem mass spectrometry (MS/MS). The presented method allows sensitive anal. of glycans benefiting from optimized deglycosylation reactions and efficient sample cleanup.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 8 OF 45 HCAPIUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:964076 HCAPIUS Full-text

DOCUMENT NUMBER: 143:298063

TITLE: Synthesis of the new reagent 1-azobenzene-3-(5-bromo-2-pyridyl)triazene and its color reaction with cadmium

Zheng, Yun-fe; Zhang, Chun-niu; Xiang,

Yue-fang

Dep. of Chem., Lishui Univ., Lishui, 323000, Peop.

Rep. China

SOURCE: Huaxue Shiji (2005), 27(7), 413-414, 436

CODEN: HUSHDR; ISSN: 0258-3283

PUBLISHER: Huaxue Shiji Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

OTHER SOURCE(S): CASREACT 143:298063

AB The chromogenic reagent 1-azobenzene-3-(5-bromo-2-pyridyl)triazene (ABBPDT) was synthesized and its color reaction with Cd was studied. In the presence of the surface active agent Triton X-100 and in the Na2B4O7-NaOH medium of pH 11.0, ABBPDT formed a red complex with Cd(II). The apparent molar absorptivity of the complex was 1.826 × 10⁵ L mol⁻¹ cm⁻¹ at 525 nm (λ_{max}). The molar ratio of Cd(II) to ABBPDT was 1:4. Beer's law was obeyed at 0-15

µg/25 mL for Cd. The method was applied to the direct determination of Cd in practical samples with satisfactory results.

L30 ANSWER 9 OF 45 WPIFS COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2004-784631 [77] WPIFS
 DOC. NO. CFI: C2004-274656 [77]
 DOC. NO. NON-CFI: N2004-618386 [77]
 TITLE: Preparation of a sample for mass spectrometry analysis involves reacting a triaryl phosphonium labeling reagent with a sample containing an analyte having an exposed group
 DERWENT CLASS: E11; J04; S03
 INVENTOR: CHEN W; GEBLER J C; LEE P J J
 PATENT ASSIGNEE: (WATE-N) WATERS INVESTMENTS LTD
 COUNTRY COUNT: 106
 PATENT INFO ABBR.:
 PATENT NO KIND DATE WEEK LA PG MAIN IPC
 WO 2004092707 A2 20041028 (200477)* EN 99[0]
 DE 112004000613 T5 20060309 (200618) DE
 JP 2006523845 W 20061019 (200669) JP 71

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004092707 A2		WO 2004-US11426	20040414
DE 112004000613 T5		DE 2004-112004000613	20040414
DE 112004000613 T5		WO 2004-US11426	20040414
JP 2006523845 W		WO 2004-US11426	20040414
JP 2006523845 W		JP 2006-510002	20040414

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 112004000613 T5	Based on	WO 2004092707 A
JP 2006523845 W	Based on	WO 2004092707 A

PRIORITY APPLN. INFO: US 2003-462997 20030414
 AN 2004-784631 [77] WPIFS
 AB WO 2004092707 A2 UPAB: 20050707

NOVELTY - Preparation (P1) of a sample for mass spectrometry analysis involves obtaining a triaryl phosphonium labeling reagent with a reactive group, obtaining a sample containing an analyte that has an exposed group and reacting the analyte with the labeling reagent.
 DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
 (1) preparation (P2) of a sample for mass spectrometry analysis involves obtaining at least two triaryl phosphonium labeling reagents, each having a reactive group, where the reactive groups of the labeling reagents are all the same and the molecular weights of the triaryl phosphonium groups of the labeling reagents are different from each other, obtaining a sample containing an analyte that has an exposed group, and reacting the labeling reagents with the analyte such that the triaryl phosphonium linked analytes are formed;
 (2) preparation (P3) of a sample for mass spectrometry analysis involving obtaining a sample comprising an analyte having an exposed group and reacting the analyte with at least three labeling reagents of formulae (Ia), (Ib) and

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NOVELTY - An emulsion type modifier comprises (parts per hundred) monomers of 6-12 diester of dicarboxylic acid (15-35), monomers of 2-16C vinyl ester (15-35), monomers of 4-8C alkyl acrylate (35-65), monomers containing acetoacetoxy functional group (0.1-2), non-ionic surfactant (0.1-2), anionic surfactant (0.4-3), and de-ionized water (60-70). The total weight of the first three components is 100 parts, while the remaining components are added based on the total weight of the first three components.
 DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a pressure-sensitive adhesive comprising (parts per hundred) pressure-sensitive emulsion acrylic adhesive (100), and emulsion type of modifier (5-30).
 USE - For use in pressure-sensitive emulsion acrylic adhesives.
 ADVANTAGE - The invention improves properties of pressure-sensitive emulsion acrylic adhesives, e.g. surface adhesion towards the low surface energy substrates, e.g. polyolefins, and steel. It has high stability and good durability. It improves loop tack and holding power of the adhesives.

L30 ANSWER 11 OF 45 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2004:869470 SCISEARCH Full-text
 THE GENUINE ARTICLE: 85595
 TITLE: Preparation and characterization of SnO nanowhiskers
 AUTHOR: Jia Z J; Zhu L P (Reprint); Liao G M; Tu X; Tang Y W
 CORPORATE SOURCE: Cent China Normal Univ, Dept Phys, Ctr Nanosci & Technol, Wuhan 430079, Peoples R China (Reprint); Cent China Normal Univ, Coll Chem, Wuhan 430079, Peoples R China
 COUNTRY OF AUTHOR: Peoples R China
 SOURCE: SOLID STATE COMMUNICATIONS, (OCT 2004) Vol. 132, No. 2, pp. 79-82.
 PUBLISHER: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND.
 DOCUMENT TYPE: Article; Journal
 LANGUAGE: English
 REFERENCE COUNT: 13
 ENTRY DATE: Entered STN: 22 Oct 2004
 Last Updated on STN: 22 Oct 2004
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB In this paper, some single-crystal line Stannous oxide (SnO) nanowhiskers were successfully prepared by a wet method using SnCl₂ · 2H₂O as raw material and cetyltrimethylammoniumbromide (CTAB) as surfactant. The morphologies, purity and sizes of the products were characterized by transmission electron microscopy, powder X-ray diffraction and standard selected area electron diffraction. The results showed that the diameter and the length of the particles were 10-30 and 200-600 nm, respectively. The influence of some reaction parameters, including the pressure, the temperature, the surfactant and the reaction duration, on the formation, morphology and particle size of SnO crystallite is discussed. (C) 2004 Elsevier Ltd. All rights reserved.

L30 ANSWER 12 OF 45 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2003:972250 HCAPLUS Full-text
 DOCUMENT NUMBER: 140:25191
 TITLE: Destructible surfactants and uses thereof
 INVENTOR(S): Bouvier, Edouard S. P.; Copton,

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(Ic); (3) a composition (C1) comprising at least two different labeling reagents (Ia), each having a different molecular weight; and (4) a kit for use in preparing a sample for mass spectrometry analysis comprising the labeling reagent (Ia), buffer chemicals and instructions for use in sample preparation methods. (Ar3P(R)X)- (Ia)
 (Ar'3P(R)X)- (Ib)
 ((Ar1)3P(R)X)- (Ic)
 Ar, Ar', Ar1 = aryl;
 P = phosphorous atom;
 R = reactive group comprising a functional group that reacts with the exposed functional group to form a covalent bond, to link the analyte to the triaryl phosphonium group of the labeling reagent;
 X- = negatively charged counter ion. Provided that in (P2), Ar and Ar' of (Ia) and (Ib) are aryl such that the molecular weight of Ar3P is different from the weight of Ar'3P.
 USE - For the preparation of a sample for mass spectrometry analysis e.g. quantitative matrix-assisted laser desorption/ionization mass spectrometry or electrospray mass spectrometry (claimed).
 ADVANTAGE - The methods provide quantitative mass spectrometry measurement of molecules at the picomole, femtomole, and attomole level. The measurement of m/z (mass/charge or mass/ionization ratio) values is not complicated by the low mass interference that a matrix normally offers and therefore the methods provide mass spectrometry analysis of low molecular weight samples as well as mixtures of high and low molecular weight samples.

L30 ANSWER 10 OF 45 WPIFS COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2004-708744 [69] WPIFS
 DOC. NO. CFI: C2004-249961 [69]
 TITLE: Emulsion type modifier for pressure-sensitive emulsion acrylic adhesives, has dicarboxylic acid diester, vinyl ester, alkyl acrylate, and acetoacetoxy functional group with monomers, and surfactants

DERWENT CLASS: A14; A81; G03
 INVENTOR: GAU C; KAO C; LEE P; LIN C; YANG B
 PATENT ASSIGNEE: (FOUR-N) FOUR FILARIS ENTERPRISE CO LTD; (KAO-C) KAO C; (LEE-P) LEE P; (LING-I) LIN C; (YANG-I) YANG B; (CHIE-N) CHIEF INVESTMENT CORP
 COUNTRY COUNT: 2
 PATENT INFO ABBR.:
 PATENT NO KIND DATE WEEK LA PG MAIN IPC
 US 20040192820 A1 20040930 (200469)* EN 4[0]
 TW 2004009804 A 20040616 (200571) 2H
 US 7041754 B2 20060509 (200633) EN

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20040192820 A1		US 2003-735275	20031212
TW 2004009804 A		TW 2002-135910	20021212

PRIORITY APPLN. INFO: TW 2002-135910
 AN 2004-708744 [69] WPIFS
 AB US 20040192820 A1 UPAB: 20060122

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Bruce John; Gebler, John C.;
 Gilar, Martin; Tu, Ying-Qing;
 Lee, Peter Jang Jong; Brown,
 Elizabeth R.

PATENT ASSIGNEE(S): Waters Investments Limited, USA
 SOURCE: PCT Int. Appl., 60 pp.
 CODEN: PIXX2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102225	A1	20031211	WO 2003-US16820	20030530
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CE, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MW, MX, MY, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RN: GH, GM, KE, LS, MW, ME, SD, SI, SZ, TG, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CS, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CP, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003234682	A1	20031219	AU 2003-234682	20030530
US 2006057659	A1	20060316	US 2005-516418	20050513
PRIORITY APPLN. INFO.:			US 2002-385021F	P 20020531
			WO 2003-US16820	W 20030530

AB The present invention provides methods for enhancing chemical reactions of mols., e.g., biomols., with destructible surfactants. The chemical reactions may involve and/or be associated with anal., e.g., solubilizing, separating, purifying and/or characterizing the mols. In one aspect, the anionic surfactants of the present invention may be selectively broken up at relatively low pH. The resulting breakdown products of the surfactants may be removed from the mol./sample with relative ease. The invention has applicability in a variety of anal. techniques.
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 13 OF 45 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:797698 HCAPLUS Full-text
 DOCUMENT NUMBER: 143:171305
 TITLE: Double parameter based cell cycle analyzing method
 INVENTOR(S): Gong, Jianping; Qin, Jichao; Tao, Deding; Leng, Yan; Shen, Manli; Feng, Yongdong; Gao, Chun; Tu, Yuan
 PATENT ASSIGNEE(S): Tongji Hospital of Tongji Medical College of Huazhong University of Science and Technology, Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 14 JP
 CODEN: CNXKEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1

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PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1417584	A	20030514	CN 2001-133652	20011108

PRIORITY APPLN. INFO.: CN 2001-133652 20011108

AB The method comprises centrifuging the (2-8) x 105 mL-1 cell that is immobilized with 70-80% glacial acetic acid for 22 h to remove the immobilizing solution, washing with phosphate buffer; adding surfactant (0.25% Triton X-100), standing for 5-10 min, washing with phosphate buffer; mixing mouse-anti-human cyclin E monoclonal antibody with mouse-anti-human cyclin A monoclonal antibody and 0.01 g mL-1 bovine serum albumin phosphate buffer to obtain mixed antibody; culturing the above treated cell with the mixed antibody at 2-8° for 0.5-48 h; washing with phosphate buffer; mixing with fluorescein isothiocyanate labeled goat-anti-mouse Ig with 0.01 g mL-1 bovine serum albumin phosphate buffer (at the volume ratio of 1:10-20); culturing the above cultured cell with the labeled Ig composite at room temperature in dark ambient for 20-30 min, washing with phosphate buffer; allowing to react with 0.005-0.1 mg mL-1 propidium iodide-0.01 mg mL-1 RNase phosphate buffer at room temperature in dark ambient for 20-30 min, and detecting via flow cytometer.

L30 ANSWER 14 OF 45 WPIOS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-585066 [55] WPIOS
 CROSS REFERENCE: 2003-194922
 DOC. NO. CPI: C2003-158310 [55]
 DOC. NO. NON-CPI: N2003-465739 [55]
 TITLE: Test strip for determining concentration of analyte, e.g., glucose in physiological sample, comprises fluid transfer element for transferring sample to reaction area of test strip
 DERWENT CLASS: A89; A96; B04; D16; F31; S03
 INVENTOR: MATZINGER D; QUARAISHI K; QUARAISHI K R;
 PATENT ASSIGNEE: (LIFE-N) LIFESCAN INC; (LIFE-N) LIFESCAN LLC;
 (MATS-I) MATZINGER D; (QURA-I) QUARAISHI K R
 COUNTRY COUNT: 39
 PATENT INFO ABBR.: 39

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20030044854	A1	20030306	(200355)	EN	19[5]	
CA 2398077	A1	20030305	(200355)	EN		
CN 1407339	A	20030402	(200355)	ZH		
CE 2002002966	A3	20030514	(200355)	CS		
EP 1291653	A2	20030312	(200355)	EN		
JP 2003139772	A	20030514	(200355)	JA	15	
KR 2003021143	A	20030312	(200355)	KO		
AU 2002300648	A1	20030612	(200455)	EN		
US 6884592	B2	20050426	(200528)	EN		
MX 2002008662	A1	20050201	(200564)	ES		
IN 2002000492	I2	20051028	(200580)	EN		
IL 151307	A	20060705	(200669)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
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US 20030044854 A1	US 2001-946215 20010905
CA 2398077 A1	CA 2002-2398077 20020814
AU 2002300648 A1	AU 2002-300648 20020820
IN 2002000492 I2	IN 2002-K0492 20020820
EP 1291653 A2	EP 2002-255891 20020823
CE 2002002966 A3	CZ 2002-2966 20020903
CN 1407339 A	CN 2002-131959 20020904
JP 2003139772 A	JP 2002-259176 20020904
KR 2003021143 A	KR 2002-53151 20020904
MX 2002008662 A1	MX 2002-8662 20020904
IL 151307 A	IL 2002-151307 20020816

PRIORITY APPLN. INFO: US 2001-946215 20010905

AN 2003-585066 [55] WPIOS

CR 2005-194922

US 20030044854 A1 UPAB: 20060202

NOVELTY - A test strip (1) comprising a fluid transfer element (10) for transferring sample to a reaction area (8) of the test strip, is new. The fluid transfer element comprises first and second areas (12, 14), where the thickness of the first area differs from that of the second area. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (a) making the test strip comprising providing a compression mold assembly having a protrusion configured to mold a second area of the transport element; providing precursor material; inserting the precursor material within the mold assembly; and applying pressure to the precursor material to provide a resulting transport element; (b) making a transport element comprising providing a compression mold assembly; inserting a precursor material within the mold assembly; and applying pressure to the precursor material to provide the transport element; and (c) a kit for determining the concentration of the analyte in a physiological sample comprising test strip; and substrate having instruction for using the test strip to determine the concentration of the analyte. USE - (1) is useful for determining the concentration of the analyte, e.g., glucose in a physiological sample, e.g., interstitial fluid, blood, blood fractions or their constituent by applying sample to a test strip comprised of fluid transport element (claimed). ADVANTAGE - The invention facilitates transfers of sample to a reaction area of the test strip. It is easy to use and manufacture. DESCRIPTION OF DRAWINGS - The figure is an exploded view of the test strips. Reaction area (8) Fluid transfer element (10) First and second areas (12, 14)

L30 ANSWER 15 OF 45 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2003:545292 HCAPLUS Full-text
 DOCUMENT NUMBER: 139:123224
 TITLE: Synthesis, Characterization, and Catalytic Activity of Mesoporous Titanosilicates Assembled from Polymer Surfactants with Preformed Titanosilicate Precursors in Strongly Acidic Media
 AUTHOR(S): Meng, Xiangju; Li, Defeng; Yang, Xiaoyu; Yu, Yi; Wu, Shuo; Han, Yu; Yang, Qing; Jiang, Dazhen; Xiao, Feng-Shou
 CORPORATE SOURCE: State Key Laboratory of Inorganic Synthesis and Preparative and Chemistry, Department of Chemistry, Jilin University, Changchun, 130023, Peop. Rep. China
 SOURCE: Journal of Physical Chemistry B (2003), 107(34),

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8972-8980
 CODEN: JPCBPK; ISSN: 1520-6106
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Novel mesostructured titanosilicates designated as MTS-9 have been successfully synthesized from assembly of preformed nanosized titanosilicate precursors with polymer surfactants. Mesoporous MTS-9 shows highly hydrothermal stability in boiling water (over 120 h) as compared with that of Ti-MCM-41 and SBA-15. In phenol hydroxylation, Ti-MCM-41 shows very low catalytic activity (2.5%), but MTS-9 exhibits very high catalytic activity, with phenol conversion of 26%, which is comparable with TS-1. In styrene epoxidation, MTS-9 shows high activity and selectivity similar to those of TS-1, which are much different from those of Ti-MCM-41. In 2,3,6-trimethylphenol hydroxylation, Ti-MCM-41 is inactive because of the relatively low oxidation ability of Ti species in the amorphous wall of Ti-MCM-41, and TS-1 is also inactive because of the inaccessibility of the small micropores of TS-1 to the large diameter of a bulky mol. like 2,3,6-trimethylphenol. However, MTS-9 is very active for this reaction with conversion of 18.8% indicating that MTS-9 is an effective catalyst for the oxidation of bulky mols. The MTS-9 samples were characterized with IR, UV-visible, UV-Raman, and numerous other techniques. The results suggest that the titanium species in MTS-9 are TS-1-like, and that the pore walls of MTS-9 contains primary and secondary structural building units, similar to those of microporous zeolites. Such unique structural features might be responsible for the observed strong oxidation ability and high hydrothermal stability of the mesostructured titanosilicates. Heating MTS-9 at 500 °C leads to the transformation of titanium species, giving relatively low catalytic conversion in phenol hydroxylation, which suggests that increasing thermal stability of titanium sites like TS-1 species in the mesoporous wall is still a great task for preparation of mesostructured titanosilicates.

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 16 OF 45 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:706917 HCAPLUS Full-text
 DOCUMENT NUMBER: 141:369274
 TITLE: Preparation and characterization of SnO nanowhiskers
 AUTHOR(S): Jia, Zhi-jie; Zhu, Lu-ping; Liao, Gui-hong; Yu, Tin; Tang, Yi-wen
 CORPORATE SOURCE: Department of Physics, Center of Nano-Science and Technology, Central China Normal University, Wuhan, 430079, Peop. Rep. China
 SOURCE: Solid State Communications (2003), Volume Date 2004, 132(2), 79-82
 CODEN: SSCOA4; ISSN: 0038-1098
 PUBLISHER: Elsevier Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB In this paper, some single-crystalline Stannous oxide (SnO) nanowhiskers were successfully prepared by a wet method using SnCl2·2H2O as raw material and cetyltrimethylammoniumbromide (CTAB) as surfactant. The morphologies, purity and sizes of the products were characterized by transmission electron microscopy, powder x-ray diffraction and standard selected area electron diffraction. The results showed that the diameter and the length of the particles were 10-30 and 200-400 nm, resp. The influence of some reaction parameters, including the pressure, the temperature, the surfactant and the

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reaction duration, on the formation, morphol. and particle size of SnO crystallite is discussed.
 REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 17 OF 45 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 2003:26346 HCAPLUS Full-text
 DOCUMENT NUMBER: 139:65609
 TITLE: Spectra studies on interaction of bovine serum albumin with acidic chrome blue K in acidic solution
 AUTHOR(S): Yu, Ying; Liao, Jian; Huang, Fa-de
 CORPORATE SOURCE: Department of Chemistry, South China Normal University, Canton, 510631, Peop. Rep. China
 SOURCE: Guangpuxue Yu Guangpu Fenxi (2002), 22(6), 1067-1069
 CODEN: GYGFD; ISSN: 1000-0593
 PUBLISHER: Beijing Daxue Chubanshe
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB This paper investigated the interaction of acidic chrome blue K with bovine serum albumin (BSA). When BSA was added into acidic chrome blue K solution at pH 2.87 HCl-NaAc buffer, bathochromic effect and hypochromicity were observed. With the increase in BSA concentration, the absorption peak at 523 nm decreased. It was considered that the combination of BSA with acidic chrome blue K is due to static electricity forces. The interaction is in accord with model of phase distribution. It was discussed the effect of acidity, concentration of acidic chrome blue K, ion strength to apparent binding constant K_b, binding number n, Sandell constant. The reaction time, surfactant, work curve were studied.

L30 ANSWER 18 OF 45 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:354810 HCAPLUS Full-text
 DOCUMENT NUMBER: 137:172059
 TITLE: Study on thermal stability of endothermic hydrocarbon fuels for hypersonic propulsion. II. Autoxidation mechanism and additives evaluation
 AUTHOR(S): Fan, Qi-ming; Mi, Zhen-tao; Yu, Yan; Zhang, Xiang-wen
 CORPORATE SOURCE: School of Chemical Engineering and Technology, Tianjin University, Tianjin, 300072, Peop. Rep. China
 SOURCE: Ranshao Huaxue Xuebao (2002), 30(2), 167-170
 CODEN: RHXUD8; ISSN: 0253-2409
 PUBLISHER: Kexue Chubanshe
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

AB Additives and additive packages were evaluated as the most effective and economical measures to improve the thermal stability of jet fuels, after an anal. of the autoxidn. mechanism of fuels under thermal oxidative stress testing as well as testing of detergent-dispersant and metal deactivators. A new type of detergent-dispersant called as pentaerythritol ester of polyisobutylthiophosphonic acid (PETPA) is synthesized, and its structure was analyzed by FT-IR and NMR to give the reaction processes. The effects of additive and additive package containing antioxidant (A), detergent-dispersant (D) and metal deactivator (M) in reducing the thermal oxidation deposit were studied. The result showed that the inhibitive effect order is AMD > MD > AD > AM > D > M > A. Overall, the detergent-dispersant is the dominant

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additive, and all combinations containing it exhibit the significant improvement in thermal stability based on deposit criterion. The greatest improvement in reducing deposit (improving thermal stability) occurred with the use of the three-additive combination. The deposit amts. were reduced by 87.10%, 90.91%, and 89.12% in RP-3 (conventional jet fuel), MCH (methylcyclohexane), and THDCPD (tetrahydrodicyclopentadiene), resp. PETPA shows a greater effect on reducing deposits than T-154 (surfactant) used either single or together.

L30 ANSWER 19 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2002:948778 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 138:179852
TITLE: Determination of nickel using dual - wavelength increasing sensitivity method with a new reagent 8Q59AC

AUTHOR(S): Zhou, Qiu-yun; Xu, Ying
CORPORATE SOURCE: Department of Chemistry, South China Normal University, Canton, 510631, Peop. Rep. China
SOURCE: Huanan Shifan Daxue Xuebao, Ziran Kexueban (2002), (3), 100-102
CODEN: HSDZER; ISSN: 1000-5463

PUBLISHER: Huanan Shifan Daxue
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB A new method for determination of Nickel using 2-(8-hydroxyquinolino-5-sulfoacid-7-azo)-1,8-dihydroxy-3,6-naphthalene disulfonic acid is studied. In pH 9.37 B-R media, Nickel and 8Q59AC react to form a 1:3 complex, using surface active agent CTAB for sensitivity enhancement. The maximum absorbance of the reagent is 692 nm, the complex is 542 nm, and the apparent molar absorptivity is 6.0×10^4 L mol⁻¹ cm⁻¹. Beer's law is obeyed in 0.001-20 µg/25 mL for Nickel. The sensitivity increased by 2.5 times in contrast with using single wavelength. The method is applied to the determination of Nickel in actual samples with satisfactory results.

L30 ANSWER 20 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2002:6465 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 136:114951
TITLE: Application and investigation of the reaction between arsenazo III-Ytterbium III and bovine serum albumin

AUTHOR(S): Xu, Ying; Huang, Fude; Gao, Qing
CORPORATE SOURCE: South China Normal Univ., Canton, 510631, Peop. Rep. China
SOURCE: Fenxi Huaxue (2001), 29(10), 1205-1208
CODEN: FHHHDT; ISSN: 0253-3820

PUBLISHER: Zhongguo Huaxuehui "Fenxi Huaxue" Bianji Weiyuanhui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The interaction between arsenazo III-Ytterbium(III) and bovine serum albumin (BSA) was investigated. When BSA was added into arsenazo III-Yb(III) solution at pH 2.48, bathochromic effect and hypochromicity were observed. With the increase in BSA concentration, the absorption peak at 650 nm decreased strikingly. A spectrophotometric method for the determination of protein was established by using arsenazo III-Yb(III) complex, the determination result obtained by this method agreed well with that by UV method in real samples. The influences of exptl. conditions on the determination were also discussed. The interaction of arsenazo III - Yb(III) and BSA was in accord with the

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ACCESSION NUMBER: 2000:824508 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 134:2339
TITLE: Destructible surfactants and uses thereof
INVENTOR(S): Lee, Peter Jeng Jong; Compton, Bruce J.

PATENT ASSIGNEE(S): Waters Investments Ltd., USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: FHXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000070334	A1	20001123	WO 2000-US13028	20000512
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, VN, YU, ZW, AM, AS, BY, KG, KZ, MD, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000048435	A5	20001205	AU 2000-48435	20000512
EP 1181537	A1	20020227	EP 2000-930651	20000512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			US 1999-134113P	P 19990514
			WO 2000-US13028	W 20000512

OTHER SOURCE(S): MARPAT 134:2339

AB Destructible surfactants and methods of using same are provided. The invention includes anionic surfactants having a dioxolane or dioxane functional group which enables the surfactant to be broken down under acidic conditions. The invention also includes methods of making anionic surfactants and methods of using anionic surfactants in a variety of applications.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 24 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2001:290252 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 134:289317
TITLE: Method and apparatus for manufacturing ferrofluids
INVENTOR(S): Xu, Jiaoren; Liu, Siliang; Teng, Ronghou; Yu, Tingqi

PATENT ASSIGNEE(S): General Research Institute of Iron and Steel, Ministry of Metallurgical Industry, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shumingshu, 9 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

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scatchard model. It was found that the effect of BSA on the spectrum of arsenazo III-Yb(III) was similar to that of cationic surfactant.

L30 ANSWER 21 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN DUPLICATE 6

ACCESSION NUMBER: 2001:97898 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 134:248947
TITLE: Advances in sample preparation in

electromigration, chromatographic and mass spectrometric separation methods
Gilar, M.; Bouvier, E. S. P.; Compton, B. J.

CORPORATE SOURCE: Waters Corp., Milford, MA, 01757, USA
SOURCE: Journal of Chromatography, A (2001), 909(2), 111-135
CODEN: JCRAZY; ISSN: 0021-9673

PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal: General Review
LANGUAGE: English

AB The quality of sample preparation is a key factor in determining the success of anal. While anal. of pharmaceutically important compds. in biol. matrices has driven forward the development of sample clean-up procedures in last 20 yr, today's chemists face an addnl. challenge: sample preparation and anal. of complex biochem. samples for characterization of genotypic or phenotypic information contained in DNA and proteins. This review, with 226 refs., focuses on various sample pretreatment methods designed to meet the requirements for the anal. of biopolymers and small drugs in complex matrices. The authors discuss the advances in development of solid-phase extraction (SPE) sorbents, online SPE, membrane-based sample preparation, and sample clean-up of biopolymers prior to their anal. by mass spectrometry.

REFERENCE COUNT: 226 THERE ARE 226 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 22 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2001:351056 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 135:168778
TITLE: Study on the reaction between calconcarboxylic acid and bovine serum albumin

AUTHOR(S): Huang, Fa-de; Xu, Ying; Jiang, Xiong
CORPORATE SOURCE: Dep. Chem., South China Normal Univ., Canton, 510631, Peop. Rep. China
SOURCE: Huanan Shifan Daxue Xuebao, Ziran Kexueban (2001), (1), 88-92
CODEN: HSDZER; ISSN: 1000-5463

PUBLISHER: Huanan Shifan Daxue
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The interaction of Calconcarboxylic Acid (CCA) and bovine serum albumin (BSA) was investigated by using spectrophotometric method and equilibrium dialysis method in acidic solution (pH 4.47). It is suggested that the hydrophobic force is the main binding force. The model of phase distribution is appropriate in the treatment of data obtained here. The effect of surface active agent to the interactional system is discussed. It is found that the effects of BSA on the spectrum of CCA were similar to that of cationic surfactant. The influences of exptl. conditions on the interaction were also discussed.

L30 ANSWER 23 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN DUPLICATE 7

ACCESSION NUMBER: 2000:851934 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 134:185788
TITLE: Microreactor-controlled selectivity in organic photochemical reactions

AUTHOR(S): Wu, Li-zhu; Zhang, Li-ping; Li, Hong-yu; Yi, Xiu-yu; Song, Kai; Xu, Ming; Yuan, Zhen-yu; Guan, Jing-qu; Wang, Hong-wei; Tang, Zhen-he; Tung, Chen-ho

CORPORATE SOURCE: Institute of Photographic Chemistry, Chinese Academy of Sciences, Beijing, 100101, Peop. Rep. China

SOURCE: Pure and Applied Chemistry (2000), 72(12), 2289-2298
CODEN: PACHAS; ISSN: 0033-4545

PUBLISHER: International Union of Pure and Applied Chemistry
DOCUMENT TYPE: Journal: General Review
LANGUAGE: English

AB The apparatus consists of reactive furnace, electrothermal pipe, stirrer, insulating jacket, infusion pump, storage tank for carbonyl metal, oil carrier and surfactant feeding pipe, protective gas feeding pipe, tail gas discharging pipe, and thermometer. The ferrofluid is prepared by adding carbonyl metal to hot oil carrier containing surfactant, and decomposing at 120-250° for 3-20 h. The oil carrier is mineral oil, α-olefin synthetic oil, or silicone oil. The surfactant is oleic acid, Be sulfonate, imine, or silane coupling agent.

L30 ANSWER 25 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN DUPLICATE 8

ACCESSION NUMBER: 2001:244371 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 135:11935
TITLE: Microreactor-controlled selectivity in organic photochemical reactions

AUTHOR(S): Tung, Chen-Ho; Wu, Li-Zhu; Zhang, Li-Ping; Li, Hong-Yu; Yi, Xiu-Yu; Song, Kai; Xu, Ming; Yuan, Zhen-Yu; Guan, Jing-Qu; Wang, Hong-Wei; Tang, Zhen-He; Tung, Chen-Ho

CORPORATE SOURCE: Institute of Photographic Chemistry, Chinese Academy of Sciences, Beijing, 100101, Peop. Rep. China

SOURCE: Pure and Applied Chemistry (2000), 72(12), 2289-2298
CODEN: PACHAS; ISSN: 0033-4545

PUBLISHER: International Union of Pure and Applied Chemistry
DOCUMENT TYPE: Journal: General Review
LANGUAGE: English

AB Mol.-sieve zeolites, Nafion membranes, low-d. polyethylene films, and mixed surfactant vesicles have been used as microreactors to carry out organic photochem. reactions. The photocycloaddns. of diaryl compds. with long flexible chains included in NaY zeolite or low-d. polyethylene films yield intramol. photocyclomers to the exclusion of intermol. products. The photosensitized oxidation of alkenes included in pentasil zeolites or Nafion membranes or vesicles can be directed selectively toward either the singlet oxygen-mediated or the superoxide radical anion-mediated products by controlling the status and location of the substrate and sensitizer mols. in the reaction media. The photo-Fries rearrangement of Ph phenylacetates included within NaY and pentasil zeolites or Nafion membranes gives either ortho-hydroxyphenones or decarbonylation products depending on the size/shape of the microreactors and the substrate mols. All these results demonstrate the utility of microreactors to control the product selectivity in organic photochem. reactions. A review with 8 refs.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 26 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2000:851934 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 134:185788
TITLE: Microreactor-controlled selectivity in organic photochemical reactions

AUTHOR(S): Wu, Li-zhu; Zhang, Li-ping; Li, Hong-yu; Yi, Xiu-yu; Song, Kai; Xu, Ming; Yuan, Zhen-yu; Guan, Jing-qu; Tang, Zhen-he; Wang, Hong-wei; Tung, Chen-ho

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LANGUAGE: Chinese
AB A review with 10 refs. Mol.-sieves zeolites, Nafion membranes, low-d. polyethylene films and mixed surfactant vesicles were used as microreactors to control the product selectivity in organic photochem. reactions. The photocyclomers. of diaryl compds. with long flexible chains included in NaY zeolite or low-d. polyethylene films yield intramol. photocyclomers to the exclusion of intermol. products. The photosensitized oxidation of alkenes included in pentasil zeolite or Nafion membrane or vesicles can be directed selectively towards either the single oxygen mediated or the superoxide radical anion mediated products by controlling the status and location of the substrate and sensitizer mols. in the reaction media. Long-lived photoinduced charge-separation in Ru (bpy)32+/viologen system at Nafion membrane-solution interface was achieved.

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THE GENUINE ARTICLE:
TITLE: Effects of ramipril on cardiovascular and microvascular outcomes in people with diabetes mellitus: results of the HOPE study and MICRO-HOPE substudy

AUTHOR: Gerstein H C (Reprint); Yusuf S; Mann J F E; Hoogwerf B; Zinman B; Held C; Fisher M; Wolfenbutter B; Bosch J; Richardson L; Pogue J; Helle J F; Yusuf S; Sleight P; Dagenais G; Montague T; Bosch J; Pogue J; Taylor W; Sardo L; Arnold M; Baigrie R; Davies R; Gerstein H; Jha P; Johnston D; Joyner C; Kuritsky A; Lonn E; Mitchell B; Morris A; Sussner B; Tao K; Tsuyuki R; Zinman B; Probstfield J; Young J; Diaz R; Paolasso E; Avezum A; Piegas L; Mann J; Wolfenbutter B; Ostergren J; Meaney E; Aprile M; Badard D; Cossette J; Ewart G; Harris L; Kellen J; LaForge D; Magi A; Skanes J; Squires P; Stevens K; Bosch J; Cherian F; Holadyk-Gris I; Kalkbrenner P; Lonn E; Mazur F; McQueen M; Micks M; Monti S; Pogue J; Sardo L; Thompson K; Westfall L; Yusuf S; Richardson L; Raw N; Genssens M; Diaz R; Paolasso E; Avezum A; Piegas L; Gerstein H; Zinman B; Dagenais G; Arnold M; Auger P; Avezum A; Bata I; Bernstein V; Bourassa M; Diaz R; Fisher B; Gerstein H; Grover J; Gun C; Gupta M; Held C; Hoeschen R; Kouz S; Lonn E; Mann J; Mathew J; Meaney E; Meldrum D; Pilon C; Ramos R; Roccaforte R; Starra R; Trivi M; Davies R; Johnston D; Lonn E; Probstfield J; McQueen M; Sackett D; Collins R; Davis E; Furberg C; Hennekens C; Pitt B; Turner R; Braver J; Cuneo C; Diaz M; Dizeo C; Guzman L; Lipshitz S; Llanos S; Lopez J; Lorenzatti A; Machado R; Mackey C; Mancini M; Marino M; Martinez F; Marone A; Worda B; Orlandini A; Romero G; Ruiz M; Ruscalleda M; Saavedra S; San Damaso J; Serra J; Tuero E; Zapata G; Zavala A; Grisold M; Klein W; Brooch E; Baumanns P; Brusselmanns H; Bodson A; Boland J; Cano J; Chaudron J M; Degoute J

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Sullebarger J; Tripp G; Zoble R; Orander P; Sridharan M; Sridharan V; Berger S; Davidson M; Geohas J; Islam M; Jamshahally R; Seikel K; Sells J; Ross A; Rossi M; Safwan E; Schindler R; Sessa F; Spinas G; Allan B; Cumming L; Fisher B; Heller S; Kennedy J; Keason C; Lochiel R; Manns J; McGroarty E; Raeburn K; Small M; Struthers S; Wilkinson I; Brown E; Holt J; Perry G; Singh B; Szlachet C; Vlachou M; Yee P; Clegg L; Horwitz L; St John M; Anderson J; Rashkow A; Schwartz K; Abercrombie L; Cintron G; Garrett D; McHale J; Miller A; Sullebarger J; Tripp G; Zoble R; Orander P; Sridharan M; Sridharan V; Berger S; Davidson M; Geohas J; Islam M; Jamshahally R; Seikel K; Sells J; Ross A; Rossi M; Safwan E; Schindler R; Sessa F; Spinas G; Allan B; Cumming L; Fisher B; Heller S; Kennedy J; Keason C; Lochiel R; Manns J; McGroarty E; Raeburn K; Small M; Struthers S; Wilkinson I; Brown E; Holt J; Perry G; Singh B; Szlachet C; Vlachou M; Yee P; Clegg L; Horwitz L; St John M; Anderson J; Rashkow A; Schwartz K; 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Methods 3577 people with diabetes included in the Heart Outcomes Prevention Evaluation study, aged 55 years or older, who had a previous cardiovascular event or at least one other cardiovascular risk factor, no clinical proteinuria, heart failure, or low ejection fraction, and who were not taking ACE inhibitors, were randomly assigned ramipril (10 mg/day) or placebo, and Vitamin E or placebo, according to a two-by-two factorial design. The combined primary outcome was myocardial infarction, stroke, or cardiovascular death. Over nephropathy was a main outcome in a substudy. Findings The study was stopped 6 months early (after 4.5 years) by the independent data safety and monitoring board because of a consistent benefit of ramipril compared with placebo. Ramipril lowered the risk of the combined primary outcome by 25% (95% CI 12-36, $p=0.0004$), myocardial infarction by 22% (6-36), stroke by 33% (10-50), cardiovascular death by 37% (21-51), total mortality by 24% (8-37), revascularisation by 17% (2-30), and overt nephropathy by 24% (3-40, $p=0.027$). After adjustment for the changes in systolic (2.4 mm Hg) and diastolic (1.0 mm Hg) blood pressures, ramipril still lowered the risk of the combined primary outcome by 25% (12-36, $p=0.0004$). Interpretation Ramipril was beneficial for cardiovascular events and overt nephropathy in people with diabetes. The cardiovascular benefit was greater than that attributable to the decrease in blood pressure. This treatment represents a vasculoprotective and renoprotective effect for people with diabetes.

L30 ANSWER 28 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN
ACCESSION NUMBER: 2001:192639 HCAPLUS Full-text
DOCUMENT NUMBER: 134:315702
TITLE: Determination of copper using dual-wavelength sensitivity enhancing method with a new reagent 8Q5SAH
AUTHOR(S): Long, Chao-yang; Yu, Ying
CORPORATE SOURCE: Dep. Chem., South China Normal Univ., Canton, 510631, Peop. Rep. China
SOURCE: Huanan Shifan Daxue Xuebao, Ziran Kexueban (2000), (4), 63-66
CODEN: HSDSER; ISSN: 1000-5463
PUBLISHER: Huanan Shifan Daxue
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB A method for determination of Cu using 2-(8'-hydroxy quinoline-5'-sulfoacid-azo)-1-hydroxy-8-amino-3,6-naphthalene disulfonic acid is presented. At pH 9.23 of NH₄Cl/NH₃-H₂O media, Cu and 8Q5SAH react to form a 1:6 complex; and the surface active agent DBS increases sensitivity. The maximum absorbance of the reagent is 640 nm; the complex is 540 nm; the apparent molar absorptivity is 2.9×10^4 L/mol-cm using the dual-wavelength increasing sensitivity method. Beer's law is obeyed at 0-35 µg Cu/25 mL. The method is applied to the determination of Cu in actual samples with satisfactory results.

L30 ANSWER 29 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 9
ACCESSION NUMBER: 1999:304835 BIOSIS Full-text
DOCUMENT NUMBER: PREV199900304835
TITLE: A novel SDS analog compatible with PAGE and MS analysis of proteins and peptides.
AUTHOR(S): Brown, B. R. [Reprint author]; Lee, J. J. [Reprint author]; Herbert, R. G. [Reprint author]; Ding, J. [Reprint author]; Bouvier, E. S. P. [Reprint author]; Livingstone, J. [Reprint author];

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LANGUAGE: Chinese
AB This paper sets up a new method for determination of Zinc using 2-(8'-hydroxyquinoline-5'-sulfoacid-azo)-1-hydroxy-8-amino-3,6-naphthalene disulfonic acid. In pH 9.8 NH₄Cl/NH₃ media Zinc and 8Q5SAH react to form a 1:2 complex and its spectrophotometric sensitivity could be enhanced by using surfactant CPB. The maximum absorbance of the reagent is 672 nm, the complex is at 573 nm, the apparent molar absorptivity is 5.2×10^4 L mol⁻¹ cm⁻¹. Beer's law is obeyed by in 0. apprx. 35 µg/25 mL for Zinc. The method is applied to the determination of Zinc in samples with satisfactory results.

L30 ANSWER 32 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN
ACCESSION NUMBER: 1998:699875 HCAPLUS Full-text
DOCUMENT NUMBER: 130:17104
TITLE: Combining ELISA, RP-HPLC, and SDS-PAGE to define the potency of a complex biologic
AUTHOR(S): Zabrecky, James R.; Brown, Elizabeth K.; Compton, Bruce J.; Kretschmer, Matthias W.; Fowler, Elizabeth; Bernardy, J. D.
CORPORATE SOURCE: AutoImmune Inc., Lexington, MA, 02139, USA
SOURCE: Pharmaceutical Technology (1998), 22(10), 36,38,40-45
CODEN: PTECHD; ISSN: 0147-8087
PUBLISHER: Advanstar Communications, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A therapeutically relevant potency assay is an essential requirement in drug development. It must be able to quantify dose, ensure product consistency, and quantify immunol. activity. The strategy described here suggests a validatable approach to defining the potency of a complex biol.

L30 ANSWER 33 OF 45 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1998347898 EMBASE Full-text
TITLE: Combining ELISA, RP-HPLC, and SDS-PAGE to define the potency of a complex biologic.
AUTHOR: Zabrecky J.R.; Brown B.K.; Compton B.J.; Kretschmer M.W.; Fowler E.; Bernardy J.D.
CORPORATE SOURCE: J.R. Zabrecky, AutoImmune Inc., 128 Spring St., Lexington, MA 02139, United States. zabrecky@erols.com
SOURCE: Pharmaceutical Technology, (1998) Vol. 22, No. 10, pp. 36-38+40-45.
Refs: 7
ISSN: 0147-8087 CODEN: PTECHD
COUNTRY: United States
DOCUMENT TYPE: Journal: General Review
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: English
ENTRY DATE: Entered STN: 12 Nov 1998
Last Updated on STN: 12 Nov 1998
DATA NOT AVAILABLE FOR THIS ACCESSION NUMBER

L30 ANSWER 34 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN DUPLICATE 11
ACCESSION NUMBER: 1998:699204 HCAPLUS Full-text
DOCUMENT NUMBER: 130:115084
TITLE: Combining ELISA, RP-HPLC, and SDS-PAGE to define the potency of a complex biologic
AUTHOR(S): Zabrecky, James R.; Brown, Elizabeth K.;

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CORPORATE SOURCE: Compton, B. J. [Reprint author]
SOURCE: Waters Corporation, Milford, MA, USA
FASEB Journal, (April 23, 1999) Vol. 13, No. 7, pp. A1478. print.
Meeting Info: Annual Meeting of the American Societies for Experimental Biology on Biochemistry and Molecular Biology 99, San Francisco, California, USA, May 16-20, 1999. American Societies for Experimental Biology. CODEN: FAJOC. ISSN: 0892-6638.
DOCUMENT TYPE: Conference; (Meeting)
LANGUAGE: English
ENTRY DATE: Entered STN: 12 Aug 1999
Last Updated on STN: 12 Aug 1999

L30 ANSWER 30 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN DUPLICATE 10
ACCESSION NUMBER: 1998:694669 HCAPLUS Full-text
TITLE: A novel synthetic strategy to aromatic-diisocyanate-based waterborne polyurethanes
AUTHOR(S): Wei, Xin; Ting, Yan; Yu, Xuehai
CORPORATE SOURCE: Department of Polymer Science and Engineering, College of Chemistry and Chemical Engineering, Nanjing University, Nanjing, 210093, Peop. Rep. China
SOURCE: Journal of Applied Polymer Science (1998), 70(8), 1621-1626
CODEN: JAPNAB; ISSN: 0021-8995
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Based on aromatic diisocyanate [e.g., 2,4-tolylene diisocyanate (TDI)], a novel synthetic strategy to waterborne polyurethanes was introduced. Ionized polyoxyethylated amine (NPEO) played an important role in the preparation process as both a polyether soft segment and an internal emulsifier. First, a segmented surfactant prepolymer was synthesized. Second, the prepolymer was charged to a water dispersible of a hydrophobic polyol [e.g., poly(tetrahydrofuran (PTHF))] directly to obtain a stable emulsion. Third, a chain-extension procedure was performed directly in water with PTHO to achieve a stable aqueous polyurethane dispersion. Neither aliphatic diisocyanate nor excess isocyanate group fraction was added. An extra end-capping reaction or external emulsifier was also unnecessary. Films cast from emulsions exhibited reasonable mech. properties.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 31 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN
ACCESSION NUMBER: 1999:373675 HCAPLUS Full-text
DOCUMENT NUMBER: 131:82251
TITLE: Determination of Zinc using dual-wavelength sensitivity enhancing method with a new reagent 8Q5SAH
AUTHOR(S): Yu, Ying
CORPORATE SOURCE: Dept. of Chemistry, South China Normal University, Canton, 510631, Peop. Rep. China
SOURCE: Huanan Shifan Daxue Xuebao, Ziran Kexueban (1998), (2), 52-53
CODEN: HSDSER; ISSN: 1000-5463
PUBLISHER: Huanan Shifan Daxue
DOCUMENT TYPE: Journal

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CORPORATE SOURCE: Compton, Bruce J.; Kretschmer, Matthias W.; Fowler, Elizabeth; Bernardy, J. D.
SOURCE: AutoImmune Inc., Lexington, MA, 02139, USA
BioPharm (Eugene, Oregon) (1998), 11(10), 30-34
CODEN: BPRME5; ISSN: 1040-8304
PUBLISHER: Advanstar Communications, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A therapeutically relevant potency assay is an essential requirement in drug development. It must be able to quantify dose, ensure product consistency, and quantify immunol. activity. The strategy described here suggests a validatable approach to defining the potency of a complex biol.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 35 OF 45 MEDLINE on STN DUPLICATE 12
ACCESSION NUMBER: 1998363468 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 9699888
TITLE: HMG-CoA reductase and ACAT inhibitors act synergistically to lower plasma cholesterol and limit atherosclerotic lesion development in the cholesterol-fed rabbit.
AUTHOR: Bocan T M; Mueller S B; Brown E Q; Lee P; Bocan M J; Rea T; Pape M E
CORPORATE SOURCE: Department of Vascular and Cardiac Diseases, Parke-Davis Pharmaceutical Research, Division of Warner Lambert Company, Ann Arbor, MI 48105, USA.
SOURCE: bocant@ea.wl.com
Atherosclerosis, (1998 Jul) Vol. 139, No. 1, pp. 21-30.
Journal code: 0242543. ISSN: 0021-9150.
PUB. COUNTRY: Ireland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199810
ENTRY DATE: Entered STN: 29 Oct 1998
Last Updated on STN: 29 Oct 1998
Entered Medline: 22 Oct 1998

AB Given the beneficial effects of HMG-CoA reductase and ACAT inhibitors on hypercholesterolemia and atherosclerosis, we hypothesized that coadministration would improve the hypolipidemic response and not only limit lesion development but also alter the cellular composition of atherosclerotic lesions so as to induce a stable atherosclerotic lesion morphology. Plasma total cholesterol exposure was reduced 29 and 39% with atorvastatin (2.5 mg/kg) and CI-976 (5 mg/kg), respectively, and 60% upon coadministration due primarily to reductions in VLDL-cholesterol. Modest changes in liver cholesterol ester (CE) content were observed with atorvastatin or CI-976; however, a striking 48% reduction was noted upon coadministration. Liver HMG-CoA reductase mRNA levels were reduced 73% by cholesterol feeding and drug treatment did not prevent the reduction; however, atorvastatin alone and upon coadministration blunted the decrease in LDL receptor mRNA levels. The CE content of the iliac-femoral was unaffected by atorvastatin but was reduced 35% by CI-976 and 53% upon coadministration. Thoracic aortic CE content was reduced 38% by atorvastatin, 48% by CI-976 and 80% upon coadministration. Iliac-femoral lesion and macrophage area were reduced 48 and 67% by atorvastatin, respectively, and 68 and 81% by CI-976 but upon coadministration only an 85% reduction in macrophage area was noted. Aortic arch cross-sectional lesion and macrophage area were unaffected by atorvastatin, decreased 72-80% by CI-976 and reduced 87-92% upon coadministration. We

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conclude that inhibition of HMG-CoA reductase and ACAT acts synergistically to lower plasma total and lipoprotein cholesterol levels and to limit the development of atherosclerotic lesions in the cholesterol-fed rabbit by presumably regulating cholesterol trafficking pathways within liver and vascular cells.

L30 ANSWER 36 OF 45 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATES 13
 ACCESSION NUMBER: 1996:331956 HCAPLUS Full-text
 DOCUMENT NUMBER: 125:18496
 TITLE: Combined absorption and self-decomposition of ozone in aqueous solutions with interfacial resistance
 AUTHOR(S): Chang, C. Y.; Chiu, C. Y.; Lee, S. J.; Huang, W. H.; Yu, Y. B.; Liou, H.T.; Ku, Y.; Chen, J. M.
 CORPORATE SOURCE: Graduate Inst. Environmental Eng., National Taiwan Univ., Taiwan
 SOURCE: Ozone: Science & Engineering (1996), 18(2), 183-194
 CODEN: OZSEDS; ISSN: 0191-9512
 PUBLISHER: Lewis
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A theor. anal. is performed employing the film model for the isothermal absorption and self-decomposition of ozone in aqueous solns. With interfacial resistance, which is inversely proportional to the interfacial mass transfer coefficient k_a . A closed-form solution has been obtained. The effects of system parameters on the ozone mass transfer rate are examined. These parameters include the interfacial resistance ($1/k_a$), the acidic and basic self-decomposition reaction rate parameters [$Mn0.5$, $Mn0.5$; $Mn = [2DAKmCAim - 1/(m+1)]/(kL0)2$, $Mn = [2DAKmCAim - 1/(n+1)]/(kL0)2$], the reaction orders (m, n), the pH value of the solution, and the liquid-phase mass transfer coefficient ($kL0$). The results indicate that the reduction effect of the interfacial resistance on the absorption rate is most significant for the situation with the larger values of Mn and Mn as well as with higher pH values. Also, for any particular finite value of $kL0/k_a$, the reduction effect encountered is greater for a gas liquid contactor with a lower $kL0$. The reduction effect should be avoided in order to maintain a higher mass transfer rate of ozone in aqueous solution. This anal. is of importance for the efficient use of ozone in water/wastewater treatment processes in the presence of interfacial resistance substances such as surface-active agents. For some known special cases (for example, cases with no interfacial resistance), the present solution reduces to the previous works of other investigators.

L30 ANSWER 37 OF 45 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN
 ACCESSION NUMBER: 1996:247881 SCISEARCH Full-text
 THE GENUINE ARTICLE: U298
 TITLE: The HOPE (Heart Outcomes Prevention Evaluation) Study: The design of a large, simple randomized trial of an angiotensin converting enzyme inhibitor (ramipril) and vitamin E in patients at high risk of cardiovascular events
 AUTHOR: Mindlen F (Reprint); Nordaby R; Ruiz M; Savala A; Langer A; Liu P; Maclean S; Moe G; Saxon S; Sternberg L; Trachuk C; Walters J; Zinman B; Cheung M; Cima C; Yao L; Man K; Fulp J; Glanz A; Sibbick M; Carter P; Oosterveld L; Hickey J; McMillan E; Dion D; Schillaire R; Coutu D; DAmours G; Starra R; Brooks J; Dechamps P; Kiwan G; Kouz S; LaForest M; Remillard C; Bellamy D; Brosseau R; Carrier S; Houde A; Leblond E; Belanger A; Kandalaf N; Quenneville L; Sandi M; Auger P; Bilodeau N; Delage F; Dumont P; Giroux R; Loisel R; Poirier C; Seunier D; Carmichael P; Lemay C; Lemis J; Arisailwan H; Bedard H; Casavant C; Chasson J; Dagenais D; Fitchett D; Gossard D; Halle H; Hamel M; Joyal M; Magnan O; Mehe M; Fedneault L; Pilon C; Poisson D; Primeau L; Rondeau C; Roy C; Ruel M; Serpa A; Sestier P; Smilovitch M; Theroux P; Beaudoin J; Boudreau J R; DAmours D; Douville T; Giguere G; Houde G; Labbe R; Lachance S; Lessard L; Mercier G; Noel H P; Talbot P; Tremblay J; Karabatsos A; MacLellan K; Wilson P; Bogaty P; LaForge D; Lengua M; LeBlanc M; Samson M; Turcotte J; Campeau J; Dupuis R; Lauson C; Oulmet P; Pruneau G; Desmaris C; Frechette I; Gervais P; Brophy J; Leroux S; Baster S; Meunier L; Sayeed M; Hart M; Moumine I; Thomasse G; Walker J; Walker M; Ahmed S; Habib N M; Habib N M; Kuny P; Lopez J; Klein W; Grisold M; Heyndrickx L; Fiasse A; Degaute J P; Mockel J; Duprez D; Chaudron J M; Bodson A; Krzestowski G; Boland J; Kolendorf K; Winther B; Juhl H; Hamalainen T; Siitonen O; Gin H; Rigalleau V; Hensen J; Riel R; Oehmenbritsch R; SchulzeSchleppinghoff B; Hopf R; Moller A; Rosak C; Wetzel H; Hasselacher C; Martin T; Stein J; Erdmann E; Bohm M; Hartmann D; Breidert M; Pritzen R; Scherbaum W; Mann J; Maus J; Schroeder C; Henrichs H; Unger H; Ickenstein G; Kromer E; Riegger G; Schunkert H; Basan B; Hampel R; Crean P; Garadah T; White U; Marini N; Paciaroni E; Saccamano G; Diluzio S; Magnani B; Mantovani B; Pareschi P; Stucchi N; Nanni D; Rusticali P; Simoni C; Brunelli C; Caponnetto S; Gatto E; Mazzantini A; Molinari O; Morello R; DeGiorgio L; Emparato C; Barbaceni A; Cotogni A; Pasqualini M; Frigeni G; Landoni M; Polese A; Cernigoi A; Merni M; Tortul C; Velussi M; Aina F; Cernigliaro C; Dellavesa P; DeJoannon U; Pierfranceschi G; Zaveroni D; Emilia R; Manicardi E; Minelli E; Penazzoli F; Fortioli I; Rossi E; Giani P; Roccaforte R; Casaccia M; LaRovere R; Miglierina E; Repetto S; Centofante P; Vincenzi M; Nieuwenhuijzen A C; Sels J; Wolfenbutter B H R; Kip J; Mantingh L; Mulder H; vanDoorn L G; Wierkink E; Reikvam A; Cardona M; Sanz G; Karoni A; Bascos L L; Albert K; Masia R; Alvarez A; Saenz L; Astrom L; Press R; Sjoestedt P; Tabrizi F; Bergbom I; Hansson P; Held C; Kahan T; Ryden B; Andersson O; Wysocki M; Karlsson E; Sartor G; Smith L; Katzman P; Ljungdahl L; Noren P; Hallberg A; Olsson P O; Asbrink S; Molgaard J; Nilsson V; Nyström F; Ohman F; Andersson C; Ekholm J; Svensson K A; Terebo B; Fagher B; Svenssten E; Thulin T; Ericsson U B; Ahlberg K; Henning R; Jacobsson L; Taghavi A; Ahlstrom P; Rosenqvist U; Ericson C; Gertow O; Kristensson B E;

Bertolami M; Caramelli B; Carvalho A; Cirenza C; Fichino M; Franken R; Ghorayeb N; Kadri T; Leao P; Malheiros P; Pavanello R; Ramires F; Ramires J; Savioli F; Sousa A; Tanajura L; Topps D; Korner L; Martinez V; Baptie B; Basinger M; Baylis B; Baresford P; Edwards A; Giannaccaro P; Greenowood V; Grose M; Kellan J; Lam S; Lasoway R; Ma P; Meldrum D; Mitchell D; Mitchell L B; Roth D; Shumak S; Simon M; Stone J; Warnica W; Wyse D; Neffgen C; Neffgen J; Armstrong P; Armstrong W; Bell N; Black W; Brass N; Brenneis F; Brownoff R; Chaytors G; DeBanne D; Derksen C; Donoff M; Dravik V; Goeres M; Greenwood P; Gulamhusein S; Hui W; Hutchison K; Kasian L; Kasza L; Krikke E; Kvill L; Lekhani E; Linklater D; Mackel J; Martin S; Montague T; Moores D; Musseau A; Muzka T; Paradis J; Prosser A; Ryan E; Senaratne M; Stenerson P; Talibi T; Teo K; Young C; Zuk V; White R; Browne K; Browne M; Hoppel K; Irving A; Plesko A; Donnelly R; Radomsky M; Felker P; Larsen D; Morse J; Rowntree C; Thompson J; Wedel R; Bloomberg G; Chomin G; Dahl M; Leong W; Moy V; Heath J; Marshall J; Terwiel M; Kenefick G; Kuritzky R; Stevens K; Weddings K; Barhan K; Imrie J; Woo K; Ashton T; Calvert K; Bishop W; Sweeney R; Breakwell L; Kornder J; Pearce S; Polasek P; Richardson P; Ghosh S; Rielly M; Wagner K; Benstein V; Dawson K; Lee P; Lewis J; MacDonald K; McGee L; Thompson C; Hilton D; Silott K; Klinka P; McConell J; McGee L; Rabkin S; Ong A; Ong G; Bedard D; Hoeschan R; Meht P; Mohammad I; Morris A; Bessoud R; Dobbins M; McLellan L; Milton J; Davis R; OKeefe D; Smith R; Joyce C; Parsons M; Skanes J; Sussex B; Tobini M; Ravalia M; Sherman G; Worrall G; Atkinson A; Hatheway R; Johnson B; Bernhill S; Bata I; Cosset J; Johnstone D; MacFarlane M; Sheridan W; Crossman L; Folkins D; Shirley M; Machel T; Morash J; Gupta M; Mayich M; Vakani T; Baitz T; MacPhae E; Turton E; Turton M; Chan W; Misterski J; Raco D; Cuzner G; Fallon E; Finkelstein L; Gerstein M; Hardman P; Lavand S; Lonn E; Magi W; McQueen M; Panju A; Patterson R; Sullivan B; Sullivan H; Sullivan M; Taylor K; Worrin I; Yusuf S; Cameron W; Noseworthy C; Houlden R; LaVelle T; Fowls R; Janzen I; Arnold M; Cann M; Carroll S; Dumaresq S; Edmonds M; Furlong P; Geddes C; Graham E; Harris K; Hramiak I; Kennedy R; Kostuk W; Krupa M; Lent B; Lovell M; MacLean C; Massel D; McManus R; McSherry J; Munoz C; Occhipinti J; Oosterveld L; Pluffelder P; Powers S; Southern R; Spence D; Squires P; Wetmore S; Willing J; Wisenberg G; Wolfe B; Kannampuzha P; Rabane T; Sluzar V; Hess A; Chan Y; Thomson D; Baigrie R; Dubbin J; Liuni C; Tan K W; Brankaton E; Hewson P; Hryciashyn B; Kapusta W; Knox L; Lockner C; Whitsett P; Baird M; Conroy D; Davies R A; Davies R F; Fraser M; Hagaz R; Hierlihy P; Keely E; Khan S; Lau D G W; Marois L; Nemeth K; Reeves E; Turek M; Vexler R; Young D; Kumar G; Kuruvilla G; Kuruvilla P; Lowe D; Kwok K; Blakely J; Styling S; Borek B; Charles J; Fell D; Fell D A; Goode E; Grossman L D; Matthews E; Nitkin R; Ricci J; Selby A; Singh M; Swan J; Emmett J; Weingart M; Baigrie R; Ganjavi F; Hill D; Nawaz S; Hessian R; Kwiatkowski K; Lai C; Muliaisho C;

Okere M; Smith H; Weeks A; Andrews J; Barrie A; Drobac M; Hacker P; Hanna A; Iwanochko M; Kenschole A; Langer A; Liu P; Maclean S; Moe G; Saxon S; Sternberg L; Trachuk C; Walters J; Zinman B; Cheung M; Cima C; Yao L; Man K; Fulp J; Glanz A; Sibbick M; Carter P; Oosterveld L; Hickey J; McMillan E; Dion D; Schillaire R; Coutu D; DAmours G; Starra R; Brooks J; Dechamps P; Kiwan G; Kouz S; LaForest M; Remillard C; Bellamy D; Brosseau R; Carrier S; Houde A; Leblond E; Belanger A; Kandalaf N; Quenneville L; Sandi M; Auger P; Bilodeau N; Delage F; Dumont P; Giroux R; Loisel R; Poirier C; Seunier D; Carmichael P; Lemay C; Lemis J; Arisailwan H; Bedard H; Casavant C; Chasson J; Dagenais D; Fitchett D; Gossard D; Halle H; Hamel M; Joyal M; Magnan O; Mehe M; Fedneault L; Pilon C; Poisson D; Primeau L; Rondeau C; Roy C; Ruel M; Serpa A; Sestier P; Smilovitch M; Theroux P; Beaudoin J; Boudreau J R; DAmours D; Douville T; Giguere G; Houde G; Labbe R; Lachance S; Lessard L; Mercier G; Noel H P; Talbot P; Tremblay J; Karabatsos A; MacLellan K; Wilson P; Bogaty P; LaForge D; Lengua M; LeBlanc M; Samson M; Turcotte J; Campeau J; Dupuis R; Lauson C; Oulmet P; Pruneau G; Desmaris C; Frechette I; Gervais P; Brophy J; Leroux S; Baster S; Meunier L; Sayeed M; Hart M; Moumine I; Thomasse G; Walker J; Walker M; Ahmed S; Habib N M; Habib N M; Kuny P; Lopez J; Klein W; Grisold M; Heyndrickx L; Fiasse A; Degaute J P; Mockel J; Duprez D; Chaudron J M; Bodson A; Krzestowski G; Boland J; Kolendorf K; Winther B; Juhl H; Hamalainen T; Siitonen O; Gin H; Rigalleau V; Hensen J; Riel R; Oehmenbritsch R; SchulzeSchleppinghoff B; Hopf R; Moller A; Rosak C; Wetzel H; Hasselacher C; Martin T; Stein J; Erdmann E; Bohm M; Hartmann D; Breidert M; Pritzen R; Scherbaum W; Mann J; Maus J; Schroeder C; Henrichs H; Unger H; Ickenstein G; Kromer E; Riegger G; Schunkert H; Basan B; Hampel R; Crean P; Garadah T; White U; Marini N; Paciaroni E; Saccamano G; Diluzio S; Magnani B; Mantovani B; Pareschi P; Stucchi N; Nanni D; Rusticali P; Simoni C; Brunelli C; Caponnetto S; Gatto E; Mazzantini A; Molinari O; Morello R; DeGiorgio L; Emparato C; Barbaceni A; Cotogni A; Pasqualini M; Frigeni G; Landoni M; Polese A; Cernigoi A; Merni M; Tortul C; Velussi M; Aina F; Cernigliaro C; Dellavesa P; DeJoannon U; Pierfranceschi G; Zaveroni D; Emilia R; Manicardi E; Minelli E; Penazzoli F; Fortioli I; Rossi E; Giani P; Roccaforte R; Casaccia M; LaRovere R; Miglierina E; Repetto S; Centofante P; Vincenzi M; Nieuwenhuijzen A C; Sels J; Wolfenbutter B H R; Kip J; Mantingh L; Mulder H; vanDoorn L G; Wierkink E; Reikvam A; Cardona M; Sanz G; Karoni A; Bascos L L; Albert K; Masia R; Alvarez A; Saenz L; Astrom L; Press R; Sjoestedt P; Tabrizi F; Bergbom I; Hansson P; Held C; Kahan T; Ryden B; Andersson O; Wysocki M; Karlsson E; Sartor G; Smith L; Katzman P; Ljungdahl L; Noren P; Hallberg A; Olsson P O; Asbrink S; Molgaard J; Nilsson V; Nyström F; Ohman F; Andersson C; Ekholm J; Svensson K A; Terebo B; Fagher B; Svenssten E; Thulin T; Ericsson U B; Ahlberg K; Henning R; Jacobsson L; Taghavi A; Ahlstrom P; Rosenqvist U; Ericson C; Gertow O; Kristensson B E;

Stahl L; Bergsten L; Harden R; Jagren C; Leijd B; Lennerhagen P; Ostergrens J; Sandstrom V; Sundelin R; Hag A; Morlin C; Pettersson P; Wanders A; Bjorkman H; Karlsson G; Larsson M; Lonn Dahl J; Weber P; Corzi R; Gerber P; Moccetti T; Safwan E; Sessa F; Binder T; Boman P; Kiowski W; Lehman R; Lull B; Spinas G; Jamieson A; Kennedy J A; Kesson C; Gryczka R; Parker P; Sidiki S; Small M; Struthers S; Manns J; Smithurst H; Begg A; Fisher B M; Bedford C; Heller S; Marlow S; Munoz E C; Garcia H H; Ruiz R A O; Heaney E; Flores M I; Brown E; Perry G; Patel G; Sarma R; Srilachciv V; Dornan J; Singh D; Bailey G; Clegg L; Horvitz L; Leahy J; Rashkov A; Hudson M; Miller A; Umberger J; Noble R; Orander P; Sriharan M; DeFrancisco G; Davidson M; Islam N; Mathew J; Rajanahally R; French D; Wickenmeyer W; Effron M; Goldstein M; Utley K; Pierpont G; Weigenant J; Farkouh M; Kubly V; Rich M; Wisneski L; Abrams J; Garcia D; Bonora M; Kohn R; Muffoletto E; Brink D; Lader E; Singler A; Pande P; Powers J; Hoogwerf B; Moore J; Yanak F; Gupta S; Williams D; Danisa K; Kirk C; Westcott B; Grover J; MacKenzie M; Anand M; Bell M; Farmer J; Kingry C; Young J; Harms V; Kennedy J W; Lattner R; Heller C; Mack R; Kennedy J W
 HAMILTON GEN HOSP, CANADIAN CARDIOVASC COLLABORAT, HAMILTON, ON L8L 2K2, CANADA
 CANADA
 CANADIAN JOURNAL OF CARDIOLOGY, (FEB 1996) Vol. 12, No. 2, pp. 127-137.
 ISSN: 0828-282X.
 PULSUS GROUP INC, 2902 S SHERIDAN WAY, OAKVILLE ON L6J 7L6, CANADA.
 Article; Journal
 CLIN
 English
 REFERENCE COUNT: 41
 ENTRY DATE: Entered STN: 1996
 Last Updated on STN: 1996
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
 AB OBJECTIVE: To describe the design of the HOPE (Heart Outcomes Prevention Evaluation) Study.
 DESIGN: Description of the key design features of HOPE, a large, simple randomized trial of two widely applicable treatments - ramipril, an angiotensin-converting enzyme inhibitor; and vitamin E, a naturally occurring antioxidant vitamin - in the prevention of myocardial infarction, stroke or cardiovascular death. SETTING: Two-hundred and sixty-seven hospitals, physician offices and clinics in Canada, the United States, Mexico, Europe and South America.
 PATIENTS: Over 9000 women and men aged 55 years and above at high risk for cardiovascular events such as myocardial infarction and stroke were recruited over 18 months. INTERVENTIONS: A 2x2 factorial design with ramipril and vitamin E with follow-up for up to four years. CONCLUSIONS: HOPE will be one of the largest trials of two new interventions to prevent myocardial infarction, stroke or cardiovascular death in high risk patients. The results of HOPE will have direct public health impact and are likely to be readily incorporated into clinical practice. Key design features of HOPE are inclusion of individuals at high risk of cardiovascular disease, inclusion of a substantial proportion of patients with diabetes (36%) and women (27%), and detailed substudies to provide data on mechanisms of benefit.

L30 ANSWER 38 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN DUPLICATE 14
 ACCESSION NUMBER: 1993:648483 HCAPLUS Full-text
 DOCUMENT NUMBER: 119:248483
 TITLE: Enzymic interesterification of triolein with tripalmitin in canola lecithin-hexane reverse micelles
 AUTHOR(S): Marangoni, Alejandro G.; McCurdy, Robert D.; Brown, Eric D.
 CORPORATE SOURCE: Dep. Food Sci., Univ. Guelph, Guelph, ON, N1G 2W1, Can.
 SOURCE: Journal of the American Oil Chemists' Society (1993), 70(8), 737-44
 CODEN: JAOCA7; ISSN: 0003-021X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Lipase-catalyzed interesterification of tripalmitin with triolein in canola lecithin-hexane reverse micelles allowed for the successful modification of triolein and tripalmitin to yield a fat of intermediate properties between the two initial substrates. Acetone-insol. canola lecithin (AIL) reverse micelles containing Rhizopus arrhizus lipase in buffer, or plain 0.1 M sodium phosphate buffer of pH 7.0, formed readily in hexane. Both had an average Stokes' radius of approx. 40 Å, as determined by quasi-elastic light-scattering detns. The reverse micelle system was stable and did not form higher-order micelle oligomers or aggregates. Biotransformation of the triglycerides was performed at 47° in a 50-mM AIL-hexane reverse micelle system containing 50% (weight/weight) oil at a water-to-surfactant ratio (w/o) of 5.5. Dynamic (oscillatory) mech. anal. indicated that the crystallization temperature of the fat dropped from 47.7 to 37.5° as judged by the storage (G') and loss (G'') modulus vs. temperature profiles after 48 h of reaction. Differential scanning calorimetric studies showed that the m.p. of the fat dropped from 61 to 57° after 48 h of reaction. Triglyceride anal. of the fat mixture by gas-liquid chromatog. (GLC) indicated that, after 48 h of reaction, the triolein content dropped from 34.5 to 29% (weight/weight), the triolein content dropped from 64.5 to 52.1% (weight/weight) and the 1-oleyl-2,3-dipalmitin content reached 7.5% (weight/weight) while the 1-palmitoyl-2,3-dioleoin content reached 7.2% (weight/weight). 1,2-Dipalmitoyldiglyceride and 1,3-dioleoyldiglyceride contents reached 1.6 and 2.4% (weight/weight), resp., after 48 h. Free fatty acid anal. of the fat mixture of GLC revealed that the free palmitic acid content increased from 0.28 to 2.4% (weight/weight) while the free oleic acid content increased from 1.4 to 5.4% (weight/weight) in the initial 24 h, after which the levels remained constant. The relatively high initial free fatty acid content of the mixture was due to free fatty acids present in the canola lecithin and not in the oils. This enzymic interesterification protocol utilizes, for the first time, an organic solvent commonly used in food processing operations and a food-grade and inexpensive surfactant that readily forms reverse micelles and yields a modified fat with improved rheol. properties for use as an edible plastic fat.

L30 ANSWER 39 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN DUPLICATE 15
 ACCESSION NUMBER: 1993:164156 HCAPLUS Full-text
 DOCUMENT NUMBER: 118:164156
 TITLE: The dependence of the lipolytic activity of Rhizopus arrhizus lipase on surfactant concentration in Aerosol-OT/isooctane reverse micelles and its relationship to enzyme structure
 AUTHOR(S): Brown, Eric D.; Yada, Rickey Y.; Marangoni, Alejandro G.
 CORPORATE SOURCE: Dep. Food Sci., Univ. Guelph, Guelph, Ontario,
 117

limited range of exptl. conditions. For homogeneous systems, the intermediate concentration can be an overestimate or an underestimate of the actual value. For heterogeneous systems, the intermediate concentration is overestimated. In both cases, the 1st-order approximation is only valid when the dead volume is a negligible part of the total volume and the ratio of the volume to the flow rate is small. For the heterogeneous case, this implies that the perturbation in the feed stream should be made to a reactant which occupies a small fraction of the total surface. This study establishes exptl. criteria for evaluating other proposals to determine kinetic information directly from transient techniques.

L30 ANSWER 41 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1981:602933 HCAPLUS Full-text
 DOCUMENT NUMBER: 95:202933
 TITLE: Photochemical processes of benzophenone in microheterogeneous systems
 AUTHOR(S): Braun, Andre M.; Krieg, Marianne; Turro, Nicholas J.; Aikawa, M.; Gould, I. R.; Graf, G. A.; Lee, Plato Chun Chih
 CORPORATE SOURCE: Inst. Chim. Phys., Ec. Polytech. Fed. Lausanne, Lausanne, 1015, Switz.
 SOURCE: Journal of the American Chemical Society (1981), 103(24), 7312-16
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The benzophenone triplet has been observed upon laser flash photolysis of the ketone solubilized in perfluorated micelles; its lifetime is found to be similar (7.87 + 10⁻⁶ s) to the value known from expts. in perfluorobenzene and perfluoromethylcyclohexane. Its ϵ_{TT} (λ_{max} 520 nm) of 2660 ± 380 L mol⁻¹ cm⁻¹ in sodium perfluorooctanoate (SPFO) and of 2460 ± 350 L mol⁻¹ cm⁻¹ in potassium perfluorooctylsulfonate have been determined by using the method of Lechish et al. and assuming $\Phi_{\text{ISC}} = 1$. Its phosphorescence is observed in perfluorated micelles, water, isooctane, and from 112 with a striking resemblance of the weakly structured spectra (λ_{max} 445 nm) in the first two systems. The emission is quenched by nonfluorinated surfactants such as sodium laurylsulfate (SLS) or cetyltrimethylammonium chloride, presumably due to hydrogen abstraction; phosphorescence, triplet-triplet, and ketyl radical absorption transients are observed at concns. of SLS above CMC, where the ketone should be nearly completely solubilized in a highly reactive micellar environment. Under micellar conditions, hydrogen abstraction occurs within the duration of the laser pulse (\approx 30 ns). The kinetics of the triplet decay in perfluorated micelles as well as the decay of the ketyl radical, which results from hydrogen abstraction in SLS micelles, is strictly first order. Expts. in mixed micelles of SLS and SPFO indicate a faster decay of benzophenone triplets and a greater optical d. of the signal component representing the corresponding ketyl radical when the mean occupancy number of SLS in SPFO is increased. The kinetics show a faster rate constant of hydrogen abstraction in those modeled micelles than in solns. of hydrocarbons. The solubilized ketyl radical may be deprotonated by an alkaline aqueous phase, and a cationic micelle clearly catalyzes this process. The lifetimes of ketyl radical and deprotonated ketyl radical anion are both longer in micellar systems than in homogeneous solns. due to their isolation in surfactant aggregates.

L30 ANSWER 42 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1972:86573 HCAPLUS Full-text

SOURCE: Can. Biochimica et Biophysica Acta, Protein Structure and Molecular Enzymology (1993), 1161(1), 66-72
 CODEN: BBAED2; ISSN: 0167-4838
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Aerosol OT, bis(2-ethylhexyl)sodium sulfosuccinate/isooctane reverse micelles were used to investigate the dependence of the lipolytic activity of R. arrhizus lipase on surfactant concentration. Kinetic constants for the lipolytic reaction were measured in parallel with structural studies using protein fluorescence and CD spectroscopy. Km values remained constant throughout the range of AOT concns. studied. The kcat values decreased with increasing surfactant concentration at constant water-to-surfactant ratio (w/o = 1) from 50 mM to 100 mM AOT, but remained constant from 100 to 200 mM AOT. These data suggested an association of the lipase with the micellar membrane. An inflection in the time-course of the reaction was found to be a function of both surfactant and substrate concns. and was likely an indication of the interfacial nature of the hydrolysis reaction. Structure prediction based on far-UV CD spectral data demonstrated structural reorganization of R. arrhizus lipase upon incorporation into reverse micelles which was characterized by a dramatic increase in β -sheet and overall accountable secondary structure. Other spectral changes of the lipase upon incorporation into reverse micelles included appearance of fine structure in the near-UV CD spectrum and a blue shift in the fluorescence emission maximum from 336 to 326 nm.

L30 ANSWER 40 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1986:70972 HCAPLUS Full-text
 DOCUMENT NUMBER: 104:70972
 TITLE: Analysis of the CSTR approximation under transient operation
 AUTHOR(S): Huang, Y. J.; Lee, P. I.; Schwarz, J. A.; Heydweiller, J. C.
 CORPORATE SOURCE: Dep. Chem. Eng. Mater. Sci., Syracuse Univ., Syracuse, NY, 13210, USA
 SOURCE: Chemical Engineering Communications (1985), 39(1-6), 355-70
 CODEN: CEGCAK; ISSN: 0098-6445
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A CSTR (continuous, stirred-tank reactor) approximation used to describe the behavior of a homogeneous reactor and a heterogeneous catalyst bed is analyzed under transient conditions. When uniformity in reactant concentration exists, the volume of the heterogeneous CSTR is defined as the equivalent volume in the gas phase of intermediates that are adsorbed on the active catalytic surface. Several reaction models are tested to determine the conditions under which a 1st-order response can be used directly to predict kinetic information useful for modeling. The relaxation time constant is obtained from the transient response of the reaction product subsequent to a step change of the reactant by using a 1st-order assumption. This result is used to examine the proposal that reaction intermediate concns. can be determined from such transient data. The reaction intermediate concentration, referred to as the postulated value, is calculated based on the aforementioned proposal. Solution of the mass balance equations yields the actual intermediate concentration which we refer to as the predicted value. The validity of a 1st-order relaxation assumption to determine intermediate concns. is analyzed by an operating line which is the locus of points along which the predicted and postulated values for the intermediate concentration are equal. The 1st-order relaxation anal. to obtain intermediate concns. is valid only under a

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DOCUMENT NUMBER: 76:86573
 TITLE: Organosilicon compounds as surfactants in the manufacture of polyurethane foams and as lubricants for textile fibers
 INVENTOR(S): Brown, Edwin I. G.; Jack, James; Vickers, Edward J.
 PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
 SOURCE: Brit., 10 pp.
 CODEN: BRXXAA
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1195235		19700617	GB 1967-36146	19670807
FR 1581196			FR	
US 3595894		19710727	US	19680805

AB Organosilicon compds. were prepared as surfactants in the manufacture of polyurethane foams and as lubricants for synthetic fibers. Thus, a polysiloxane-polyalkylene copolymer (I), with no Si-bonded H in the mol., was prepared by treating an esterified polyester (II) with a linear polysiloxane (III) in the presence of bis(diethyl sulfide)platinum chloride. II was prepared by treating the corresponding polyoxyalkylated cyclohexanol with allyloxycetic acid. A resilient polyurethane foam was prepared by mixing oxypropylated glycerol 100, tolylene diisocyanate 51, water 4, triethylenediamine 0.75, Sn octoate 0.3 and I 1 part.

L30 ANSWER 43 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1969:491936 HCAPLUS Full-text
 DOCUMENT NUMBER: 71:91936
 TITLE: Cupric sulfate-hydrazine-oxygen system as an initiator for the emulsion polymerization of methyl methacrylate
 AUTHOR(S): Bond, Joan; Lee, Peter Ian
 CORPORATE SOURCE: Univ. Salford, Salford, UK
 SOURCE: Journal of Applied Polymer Science (1969), 13(6), 1215-29
 CODEN: JAPNAB; ISSN: 0021-8995
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Kinetics for the emulsion polymerization of Me methacrylate (I) with CuSO₄-H₂NNH₂ initiator and O were studied. I (22.5 g.) was polymerized with 0.16M Na dodecyl sulfate (II) 23.0, 10-3M CuSO₄ solution 8.4, 2.0M hydrazine hydrate solution 6.0, and deionized water 90.1 ml. at pH 10. Polymerization did not occur at <3.4 + 10-5M CuSO₄ concentration, above which the polymerization rate increased with CuSO₄ concentration, reached a maximum at 1.8 + 10-4M, and decreased at higher concns. Decomposition of H₂NNH₂ reached a min. at 1 + 10-4M CuSO₄ or 0.04M H₂NNH₂ and increased with CuSO₄ concentration. The polymerization kinetics followed the Gershberg mechanism (D. Gershberg, 1965) with initiation occurring in the micelle, not the aqueous phase. Solution polymer occurs as a competing reaction. A I-H₂NNH₂ interaction yielded a surfactant, enhanced polymerization rates, and increased the number of particles at high I-II concentration ratios. II caused adsorption of Cu²⁺ on the micelles and was adsorbed on the Cu(OH)₂ surface to induce H₂NNH₂ decomposition. An activation energy of 23.7 kcal./mole was calculated for the process.

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L30 ANSWER 44 OF 45 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1962:409325 HCAPLUS Full-text
 DOCUMENT NUMBER: 57:9325
 ORIGINAL REFERENCE NO.: 57:1858d-g
 TITLE: Treating reinforcing silica
 INVENTOR(S): Brown, Eric D.
 PATENT ASSIGNEE(S): Dow Corning Corp.
 SOURCE: 12 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3024126		19620306	US 1960-36141	19600615
DE 1158196			DE	
GB 917831			GB	

AB The hydrophobizing reaction of the reinforcing silica should occur in a dispersion of the compds. A, B, and C in an organic solvent: (A) silica with active surface of 150-300 sq. m./g.; (B) organosilicon, based on silane or siloxane, where B is a siloxane; there are 53 di-aliphaticunivalent-hydrocarbon- radical-substituted silicon atoms in the mol., 0.1-0.6 parts of B/part of A; (C) either (1) NH₃ or amino hydrocarbons, with dissociation constant 2.0-7 in dilute aqueous solution at 25°, (2) a quaternary, ammonium hydroxide, e.g. NMe₄OH, (3) a phosphoric acid salt of any basic amino compds., e.g. eicosylamine phosphate, or (4) a monocarboxylic acid salt of (a) any basic amino compound, e.g. EtNH₂ or Bu₃N, (b) any quaternary ammonium hydroxide (see 2), or (c) any one of the following metals, Pb, Sn, Ni, Co, Fe, Cd, Cr, Zn, or Mn. Maximum efficiency occurs with 0.1-0.5 parts by weight of C/100 parts of A. The compound C must be compatible with the organic solvent. A, B, and C should be dispersed in the solvent in that order. The organic solvents should be hydrocarbons, haloalkanes, ethers, or ketones. The organic solvent, the unreacted organosilicon compds., B, and any amine-containing compound are removed after the reaction is finished by evaporating and heating. The completely hydrophobized reinforcing silicas are useful for thermal insulation, as flattening agents in paints, and as filler in silicone rubbers, giving them excellent phys. properties (tensile strength and elongation at break).

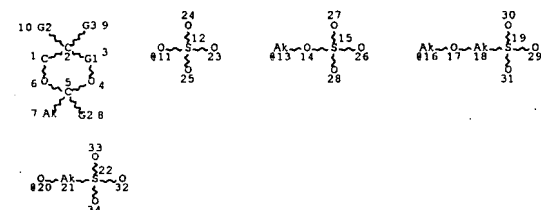
L30 ANSWER 45 OF 45 JAPIO (C) 2006 JPO ON STN
 ACCESSION NUMBER: 2006-088058 JAPIO Full-text
 TITLE: CATALYST CARRIER, METHOD FOR PRODUCING CATALYST CARRIER, CATALYST, METHOD FOR PRODUCING AMMONIA AND REACTOR
 INVENTOR: AKISHIKA KENICHI; INABU KOJI; TU YUKIO
 PATENT ASSIGNEE(S): TOKYO INSTITUTE OF TECHNOLOGY
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	ERA	MAIN IPC
JP 2006088058	A	20060406	Heisei	

APPLICATION INFORMATION
 STN FORMAT: JP 2004-277564 20040924
 ORIGINAL: JP2004277564 Heisei
 PRIORITY APPLN. INFO.: JP 2004-277564 20040924
 SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2006

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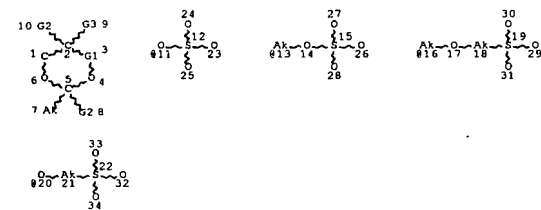
=> d que 14; d que 113; d his ful
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 VAR G2=H/CH3
 VAR G3=11/13/16/20
 NODE ATTRIBUTES:
 CONNECT IS X2 RC AT 1
 DEFAULT MLEVEL IS ATOM
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE
 L2 (113)SEA FILE=REGISTRY SSS FUL L1
 L3 STR



REP G1=(0-2) CH2
 VAR G2=H/CH3
 VAR G3=11/13/16/20
 NODE ATTRIBUTES:
 CONNECT IS X2 RC AT 1
 DEFAULT MLEVEL IS ATOM

123

AN 2006-088058 JAPIO Full-text

AB PROBLEM TO BE SOLVED: To provide a new catalyst used for ammonia production. SOLUTION: A catalyst carrier includes 6 barium aluminate. In a method for producing a catalyst carrier, first a surfactant is dissolved in an organic solvent, water is dripped in this solution and emulsion is produced. Then, an aluminium alkoxide, a barium alkoxide and a chelating agent are dissolved in the organic solvent, this organic solvent solution is loaded into the emulsion, and the aluminium alkoxide and the barium alkoxide are hydrolyzed. Next, a crystal of hydroxide is aged at predetermined temperature for predetermined time. Thereafter, a liquid phase is removed, a hydroxide particle is separated, the surfactant is thermally decomposed and then burning is carried out at predetermined temperature for predetermined time. A catalyst carries ruthenium on a carrier. Also, an alkaline metal compound, an alkaline earth metal compound or a rare earth compound can be carried as a promoter. This catalyst is used for an ammonia synthetic reaction. COPYRIGHT: (C)2006,JPO&NCPI

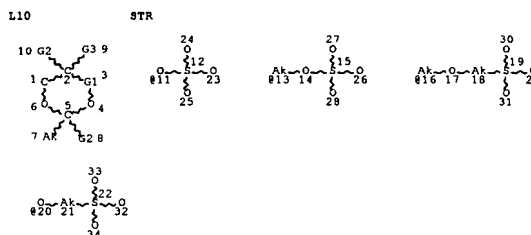
FILE 'HOME' ENTERED AT 12:24:16 ON 04 DEC 2006

122

GGCAT IS LOC AT 13
 GGCAAT IS LOC AT 16
 GGCAAT IS LOC AT 18
 GGCAAT IS LOC AT 21
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE
 L4 113 SEA FILE=REGISTRY SUB=L2 SSS FUL L3



REP G1=(0-2) CH2
 VAR G2=H/CH3
 VAR G3=11/13/16/20
 NODE ATTRIBUTES:
 CONNECT IS X2 RC AT 1
 DEFAULT MLEVEL IS ATOM
 MLEVEL IS CLASS AT 7 13 16 18 21
 GGCAAT IS LOC AT 13
 GGCAAT IS LOC AT 16
 GGCAAT IS LOC AT 18
 GGCAAT IS LOC AT 21
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
 ELEVEL IS LIM ON ALL NODES
 ALL RING(S) ARE ISOLATED

L12 55 SEA FILE=MAPAT SSS FUL L10 (MODIFIED ATTRIBUTES)
 L13 54 SEA FILE=MAPAT ABB=ON PLU=ON L12/COMPLETE

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10/516418

FILE 'REGISTRY' ENTERED AT 12:08:18 ON 04 DEC 2006
ACT ARNOL1/A

L1 STR
L2 (113)SEA SSS FUL L1
L3 STR
L4 113 SEA SUB=L2 SSS FUL L3

FILE 'REGISTRY' ENTERED AT 12:08:58 ON 04 DEC 2006
D QUE STAT

L5 FILE 'HCAPLUS' ENTERED AT 12:08:58 ON 04 DEC 2006
41 SEA ABB=ON PLU=ON L4
DEL SEL Y
SEL HIT L5 1-41 RN
D 1-41 .BEVSTR

L6 FILE 'REGISTRY' ENTERED AT 12:09:58 ON 04 DEC 2006
72 SEA ABB=ON PLU=ON (308818-13-5/BI OR 186189-03-7/BI OR
186189-06-0/BI OR 186189-04-8/BI OR 186189-05-9/BI OR
138487-16-8/BI OR 138487-18-0/BI OR 139888-69-0/BI OR
139888-70-3/BI OR 139888-72-5/BI OR 259738-92-6/BI OR
259738-94-8/BI OR 138487-17-9/BI OR 143482-00-2/BI OR
143482-02-4/BI OR 231453-51-7/BI OR 259738-90-4/BI OR
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512203-78-0/BI OR 512203-80-4/BI OR 512203-82-6/BI OR
512203-84-8/BI OR 512203-86-0/BI OR 512203-89-3/BI OR
512204-29-4/BI OR 57413-41-9/BI OR 59263-78-4/BI OR
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84846-66-2/BI OR 879551-03-8/BI OR 879551-05-0/BI OR
911829-50-0/BI OR 911829-56-6/BI OR 911829-67-9/BI OR
911829-70-4/BI)
D QUE
D 1-72 REG
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L7 FILE 'CAOLD' ENTERED AT 12:13:23 ON 04 DEC 2006
0 SEA ABB=ON PLU=ON L6

L8 FILE 'USPATFULL' ENTERED AT 12:13:33 ON 04 DEC 2006
5 SEA ABB=ON PLU=ON L6
D 1-5 IBIB ABS

L9 FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 12:13:42 ON 04 DEC 2006
0 SEA ABB=ON PLU=ON L6

L10 FILE 'MARPAT' ENTERED AT 12:13:47 ON 04 DEC 2006
STR L3

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FILE COVERS 1907 - 4 Dec 2006 VOL 145 ISS 24
FILE LAST UPDATED: 3 Dec 2006 (20061203/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE CAOLD
FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 30 Nov 2006 (20061130/PD)
FILE LAST UPDATED: 30 Nov 2006 (20061130/ED)
HIGHEST GRANTED PATENT NUMBER: US7143445
HIGHEST APPLICATION PUBLICATION NUMBER: US2006272066
CA INDEXING IS CURRENT THROUGH 28 Nov 2006 (20061128/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 30 Nov 2006 (20061130/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

FILE MEDLINE
FILE LAST UPDATED: 2 Dec 2006 (20061202/UP). FILE COVERS 1950 TO DAT

In preparation for the annual MEDLINE reload, the National Library of Medicine (NLM) has suspended delivery of regular updates as of November 15, 2006. In-process and in-data-review records will resume deliver on November 21, 2006, and will continue to be added to MEDLINE until December 17, 2006.

On December 17, 2006, all regular MEDLINE updates from November 15 to December 16 will be added to MEDLINE, along with 2007 Medical Subject Headings (MeSH(R)) and 2007 tree numbers.

L11 3 SEA SSS SAM L10 (MODIFIED ATTRIBUTES)
L12 55 SEA SSS FUL L10 (MODIFIED ATTRIBUTES)
L13 54 SEA ABB=ON PLU=ON L12/COMPLETE
D QUE STAT
D 1-54 .BEVMARI

FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 12:15:41 ON 04 DEC 2006

L14 162 SEA ABB=ON PLU=ON "BOUVIER E"7/AU
L15 269 SEA ABB=ON PLU=ON ("COPTON B"7 OR "COMPTON B"7)/AU
L16 449 SEA ABB=ON PLU=ON "GEBLER J"7/AU
L17 191 SEA ABB=ON PLU=ON "GILAR M"7/AU
L18 27791 SEA ABB=ON PLU=ON ("YU Y"7 OR "YING Y"7)/AU
L19 25309 SEA ABB=ON PLU=ON "LEE P"7/AU
L20 17049 SEA ABB=ON PLU=ON "BROWN E"7/AU
L21 2 SEA ABB=ON PLU=ON L14 AND L15 AND L16 AND L17 AND L18 AND L19 AND L20
L22 37 SEA ABB=ON PLU=ON L14 AND (L15 OR L16 OR L17 OR L18 OR L19 OR L20)
L23 16 SEA ABB=ON PLU=ON L15 AND (L16 OR L17 OR L18 OR L19 OR L20)
L24 115 SEA ABB=ON PLU=ON L16 AND (L17 OR L18 OR L19 OR L20)
L25 32 SEA ABB=ON PLU=ON L17 AND (L18 OR L19 OR L20 OR L21)
L26 45 SEA ABB=ON PLU=ON L18 AND (L19 OR L20)
L27 10 SEA ABB=ON PLU=ON L19 AND L20
L28 53 SEA ABB=ON PLU=ON (L22 OR L24 OR L25 OR L26 OR L14 OR L15 OR L16 OR L17 OR L18 OR L19 OR L20) AND (SURFACTANT OR SURFACE(LA) ACTIVE(L) (REACT7 OR RXN)
L29 73 SEA ABB=ON PLU=ON L21 OR L23 OR L27 OR L28
L30 45 DUP REM L29 (28 DUPLICATES REMOVED)
SET REM ON
D 1-45 IBIB ABS

FILE 'HOME' ENTERED AT 12:24:16 ON 04 DEC 2006
D QUE L4
D QUE L13

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 3 DEC 2006 HIGHEST RN 914612-67-2
DICTIONARY FILE UPDATES: 3 DEC 2006 HIGHEST RN 914612-67-2

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

FILE HCAPLUS

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The annual reload will be available in early 2007.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 29 November 2006 (20061129/ED)

FILE EMBASE
FILE COVERS 1974 TO 4 Dec 2006 (20061204/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE MARPAT
FILE CONTENT: 1961-PRESENT VOL 145 ISS 22 (20061201/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 20060234956 19 OCT 2006
DE 102005016345 12 OCT 2006
EP 1710237 11 OCT 2006
JP 2006282618 19 OCT 2006
WO 2006108879 19 OCT 2006
GB 2424583 04 OCT 2006
FR 2884252 13 OCT 2006
RU 2284857 10 OCT 2006
CA 2500558 10 SEP 2006

Expanded G-group definition display now available.

FILE WPIIDS
FILE LAST UPDATED: 29 NOV 2006 <20061129/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200677
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> YOU ARE IN THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX <<<

>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX PLEASE VISIT:

http://www.stn-international.de/stndatabases/details/dwpi_r.html <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

10/516418

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
<http://scientific.thomson.com/support/patents/coverage/latestupdates/>

PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html a
<http://scientific.thomson.com/media/scpdf/ipcdwpi.pdf>

>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX
PLEASE SEE
http://www.stn-international.de/stndatabases/details/dwpi_r.html <<<

>>> YOU ARE IN THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX <<<

FILE CONFSCI
FILE COVERS 1973 TO 14 Nov 2006 (20061114/ED)

CSA has resumed updates, see NEWS FILE

FILE SCISEARCH

FILE COVERS 1974 TO 30 Nov 2006 (20061130/ED)

SCISEARCH has been reloaded, see HELP RLOAD for details.

FILE JICST-EPLUS
FILE COVERS 1985 TO 27 NOV 2006 (20061127/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED
TERM (/CT) THESAURUS RELOAD.

FILE JAPIO
FILE LAST UPDATED: 20 NOV 2006 <20061120/UP>
FILE COVERS APRIL 1973 TO JULY 27, 2006

>>> GRAPHIC IMAGES AVAILABLE <<<

>>> NEW IPC8 DATA AND FUNCTIONALITY NOW AVAILABLE IN FILE JAPIO.

SEE HELP CHANGE

AND

http://www.stn-international.de/stndatabases/details/ipc_reform.html <

FILE HOME